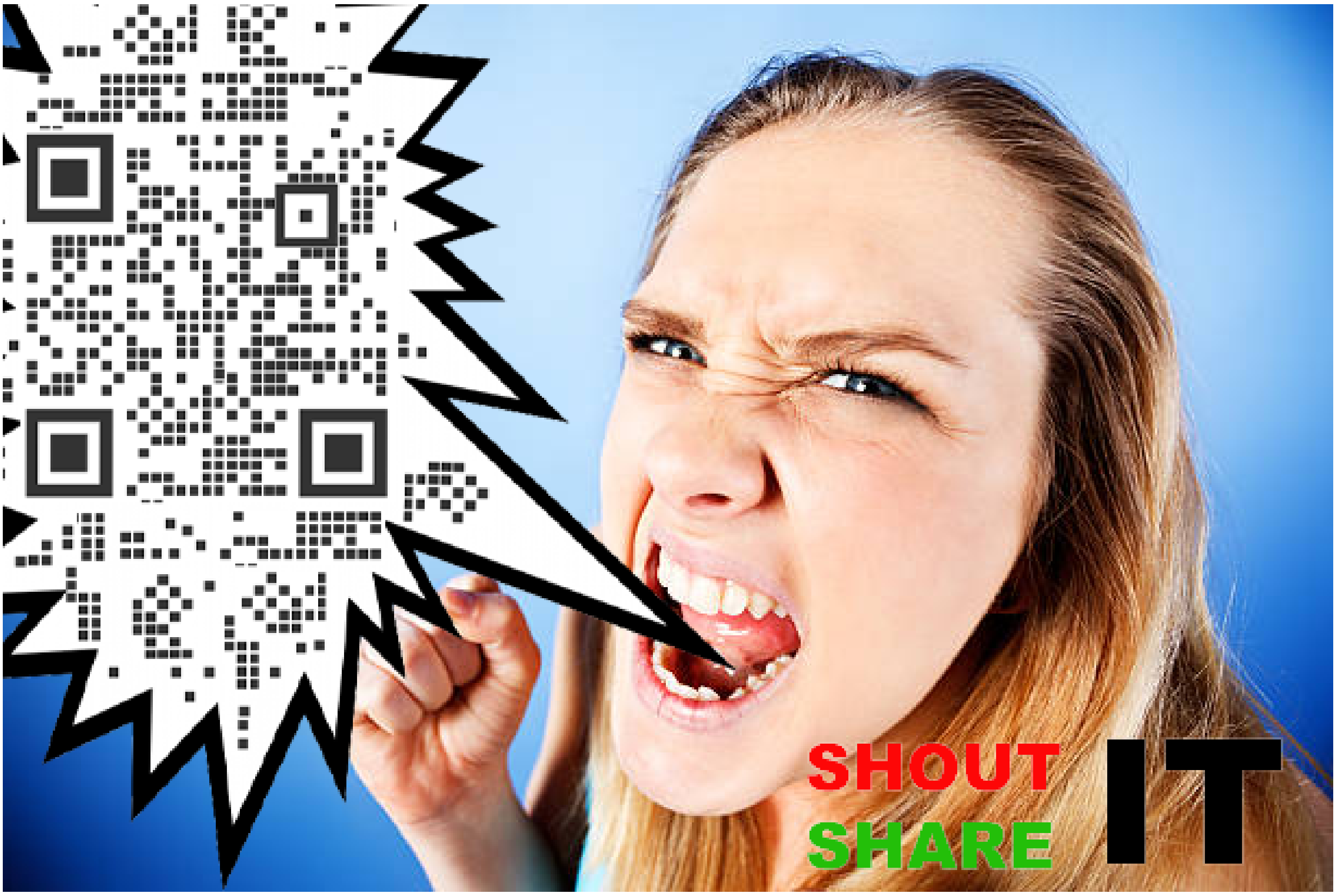
UNIV. OF
TORONTO
LIBRARY


SHOUT
SHARE
IT

BULLETIN

OF THE

American Museum of Natural History

[illegible]

New York

[illegible]

[illegible]

P
Science
A

6862

1

BULLETIN

OF THE

American Museum of Natural History.

University of Toronto Library

Vol. XVII.

119563
13/11/11

New York:
Published by order of the Trustees.
1902–07.

QH
1
A4
v. 17

CONTENTS.

PAGE

Part I. — Basketry Designs of the Indians of Northern California (Plates I–XXXVII). By ROLAND B. DIXON.
- Introductory 1
- Designs of the Northeastern Area 2
  - Maidu 2
    - 1. Animal Designs 3
    - 2. Plant Designs 5
    - 3. Designs representing Natural or Artificial Objects 7
    - Summary 10
  - Pit River 14
    - 1. Animal and Plant Designs 14
    - 2. Designs representing Natural or Artificial Objects 15
    - Summary 16
  - Wintun 17
    - 1. Animal Designs 17
    - 2. Designs representing Natural or Artificial Objects 18
    - Summary 18
  - Yana 19
- Designs of the Southeastern Area 19
- Designs of the Pomo Group 20
- Conclusion 24

Part II. — Maidu Myths. By ROLAND B. DIXON.
- Introductory 33
- Myths 39
  - 1. Creation Myth 39
  - 2. The Earth-Namer (Kō'doyanpĕ) 46
  - 3. The Conqueror 51
  - 4. Kū'tsem yĕ'poni 59
  - 5. The Search for Fire 65
  - 6. Thunder and his Daughter 67
  - 7. The Loon-Woman 71
  - 8. Sun and Moon 76
  - 9. Bear and Deer 79

PAGE
10. Coyote Tales 83
11. The Fish-Hawk and the Two Deer-Ticks . . 94
12. The To'lowim-Woman and the Butterfly-Man . 95
13. The Mountain-Lion, the Robin, and the Frog-Woman 96
14. The Cannibal Head 97
15. The Stolen Brother 98
16. Lizard and Grisly-Bear 99
17. The Skunk and the Beetle 100
18. The Wolf makes the Snow Cold 101
19. Thunder and his Daughter 101
20. Huptoli 102
21. Big-Belly's Son 102
22. Mountain-Lion and his Wives 105
Abstracts 110
1. Creation Myth 110
2. Earth-Namer 110
3. The Conqueror 111
4. Kū'tsem yĕ'poni 111
5. Search for Fire 111
6. Thunder and his Daughter 112
7. The Loon-Woman 112
8. Sun and Moon 113
9. Bear and Deer 113
10. Coyote Tales 113
11. Fish-Hawk and the Two Deer-Ticks 115
12. The To'lowim-Woman and the Butterfly-Man 116
13. Mountain-Lion, Robin, and Frog-Woman . . 116
14. The Cannibal Head 116
15. The Stolen Brother 116
16. Lizard and Grisly-Bear 116
17. Skunk and Beetle 117
18. Wolf makes the Snow Cold 117
19. Thunder and his Daughter 117
20. Huptoli 117
21. Big-Belly's Son 117
22. Mountain-Lion and his Wives 118

Part III.— The Northern Maidu (Plates XXXVIII–XLIX).
By Roland B. Dixon.

Introduction 121
Bibliography 122
Geography and History 123
Habitat and Boundaries 123
Topography 125
Divisions 127

PAGE
History 129
Population 130
Migration 132
Material Culture 132
Manufactures 132
Work in Stone 132
Work in Wood, Bone, and Shell 139
Preparation of Hides 141
Cordage and Netting 142
Basketry and Weaving 145
Work in Feathers 149
Clothing and Personal Adornment 154
Dwellings and Household Utensils 168
Food and its Preparation 181
Hunting and Fishing 192
Transportation and Trade 198
Warfare 202
Games and Amusements 207
Calendar 217
Art 218
Decorative Art 218
Music 221
Social Organization, Law, and Festivals 223
Social Organization 223
Crimes and Punishments 227
Social Gatherings and Festivals 228
Birth, Puberty, Marriage, and Death 228
Birth 228
Names 230
Puberty 232
Marriage 239
Death and Burial 241
Religion 259
Beliefs regarding the Soul 259
Conceptions of the World 262
Miscellaneous Beliefs 265
Charms 266
Shamanism 267
Ceremonial and Dances 283
The Secret Society 322
Mythology 333
Conclusion 343
Part IV. — Anthropometry of Central California (Plates L–LVIII). By Franz Boas.
Introductory 347

PAGE
Table of Corrected Measurements 348
Table of Differences 349
Measurements of Men 350
Measurements of Women 354
Average Measurements 356
List of Abbreviations 358
Measurements of Maidu 358
Measurements of Hat Creeks and Pit Rivers . . . 364
Measurements of Piute 365
Measurements of Pomo 365
Measurements of Yuki and Pomo Mixed 368
Measurements of Yuki 368
Measurements of Wintun 372
Measurements of Yokut 372
Measurements of Wintun and Yuki Mixed 372
Measurements of Wylackie 372
Measurements of Half-Breeds 372
Measurements of Maidu Half-Breeds 374
Measurements of Pit River Half-Breeds 376
Measurements of Pomo Half-Breeds 376
Measurements of Yuki Half-Breeds 377
Measurements of Wintun Half-Breeds 378
Miscellaneous Measurements 378
Table of Relationships 379
Table of Births 380
Part V.— The Shasta (Plates LXIX–LXXII). By Roland B. Dixon.
  Introduction 383
  Bibliography 383
  Geography and History 384
    Habitat and Boundaries 386
    Topography and Environment 387
    History 389
    Migration 390
  Material Culture 391
    Manufactures 391
      Work in Stone 391
      Work in Wood, Bone, and Shell 394
      Preparation of Hides 397
      Cordage and Netting 398
      Basketry and Weaving 398
      Feather-Work 403
    Clothing and Personal Adornment 407
    Dwellings and Household Utensils 413
    Food and its Preparation 423

PAGE
- Hunting and Fishing 428
- Transportation and Trade 432
- Warfare 436
- Games and Amusements 441

Art 446
- Decorative Art 446
- Music 449

Social Organization and Law 451
- Social Organization 451
- Crimes and Punishments 453

Birth, Puberty, Marriage, and Death 453
- Birth 453
- Names 456
- Puberty 457
- Marriage 461
- Death and Burial 465

Religion 468
- Beliefs regarding the Soul 468
- Conceptions of the World 470
- Miscellaneous Beliefs 470
- Shamanism 471
- Ceremonials 489

Mythology 491

Conclusion 494

Appendix 495
- The Konomī'hu 495

LIST OF ILLUSTRATIONS.

Text Figures.

1. Stone Knives 133
2. Spear-points 133
3. Arrow-point Flaker 134
4. Stone Scraper 134
5. Stone Axe 135
6. Arrow-straightener 135
7. Stone Mortar-block with Funnel-shaped Cavity 136
8. Pestle 138
9. Stone Pipes 138
10. Soapstone Vessel 139
11. Neck-pendants used as Charms 140
12. Bone Awl or Basket-needle 141

PAGE
13. Model of a fish-net 142
14. Netting-shuttle and Knots 143
15. Manufacture and Technique of Netted Cap 144
16. Technique of Three-rod Coiled Basketry 146
17. Technique of Simple Twined Basketry 147
18. Portion of Feather Belt 149
19. Feather Plume-sticks 150
20. Feather Plume-sticks 151
21. Feather "Tremblers" 151
22. Technique of Feather-tying 152
23. Feather Boa 153
24. Technique of Feather Capes 154
25. Feather Bands, and "Trembler" with Quill Squares . . . 155
26. Feather Bunches 156
27. Feather Bunches 157
28. Technique of Feather-bunch Foundation 158
29. Feather Coronet or Crown 158
30. Feather Crown 159
31. Technique of Large Feather Crown 159
32. Moccasin 160
33. Wika', or Netted Cap 161
34. Snowshoes 162
35. Woman's Apron of Shredded Bark 163
36. Combs 164
37. Bear-claw and Acorn Necklaces 165
38. Ear-ornaments 166
39. Roof-plan of the Earth Lodge of the Northwestern Maidu . 170
40. Roof-plan of the Earth Lodge of the Maidu 171
41. Roof-plan of Houses of Southern Maidu 173
42. Outlines of Maidu Basket-forms 178
43. Open-twined Tray or Plate Basket 179
44. Milling-basket and Mortar Slab 179
45. Fire-drill 181
46. Tapper and Brush used in sifting Acorn-meal 185
47. Seed-beaters 188
48. Cakes made of Seeds, Roots, and Berries 190
49. Salmon-gig 196
50. Section of Fish-trap 197
51. Cord Tump-line 199
52. Cradle frame, Summer Type 200
53. Bow and Arrows 202
54. Skin Quiver 204
55. Gambling-bones 210
56. Head of Fish, carved in Steatite 219
57. Flute and Bird-bone Whistle 221

PAGE
58. Clapper-rattle and Cocoon-rattle 222
59. Portion of a Wand, or Yo'koli 244
60. Plan of Burning-grounds 249
61. Amulet or Luck Stone 267
62. Bundle of the Sticks forming the Dö Head-dress 292
63. Netted Cap with Interwoven Down 293
64. Tule Skirt 305
65. Portion of Wand, or Yo'koli, with Feathers and Acorn-shells 313
66. Clown's Pipe, of Steatite 317
67. Portion of Wand, or Yo'koli, with Maple-bark Tassel . . 319
68. Obsidian Knife 391
69. Fragment of a Stone Pipe 391
70. Stone Pestles 392
71. Wooden Spoon 394
72. Tobacco Pipe 395
73. Salmon-gig 396
74. Necklace 396
75. Woodpecker-scalp used as Currency 398
76. Outlines of Shasta Basket-forms 400
77. Strengthening-rod in Mortar-basket 401
78. Detail of Edge on Basket, Plate LXII, Fig. 3 402
79. Detail of Edge on Basket, Plate LXII, Fig. 2 402
80. Detail of Edge on Basket, Plate LXIX, Fig. 1 402
81. Detail of Fringe on Woman's Apron, Fig. 92 403
82. Detail of Mat, Plate LXXI 404
83. Detail of Feather Attachment on Feather Band, Fig. 84 . 404
84. Feather Band used in Puberty Dance 405
85. Feather Band 405
86. Wrist-band, Plain 406
87. Wrist-band Decorated with Down 406
88. Feather Ornament 407
89. Erect Feather Attachment 408
90. Detail of Feather Tassels 408
91. Detail of Feather Pompon 409
92. Woman's Apron 410
93. Snowshoe 411
94. Necklace of Pine-nuts 414
95. Woman's Belt 415
96. Plan of a House 416
97. Vertical Section of a House 418
98. Meal-brush 423
99. Fire-drill 424
100. Fishing-net 429
101. Sketch showing the Manner of Operating a Fish-net . . 430
102. Cradle-frame 433

PAGE
103. Cradle-frame 434
104. Detail of Cradle-frame 435
105. Bow and Arrows 437
106. Model of Bow from Siletz 437
107. Section of a Sinew-backed Bow 438
108. Dancing-knife 440
109. Bundle of Sticks used in the Game Kē′tapig 441
110. Decorations on Stick for the Game Kē′tapig 442
111. Sticks tied together for Use in a Game played by Women 444
112. A Form of the Cup-and-Ball Game 445
113. Rattle made of Deer-hoofs 450
114. Scratching-stick used by Women after the Birth of a Child 455
115. Shaman's Head-dress 480
116. Shaman's Belt 482
117. Shaman's Head-dress 483
118. Head-dress worn in the Dream-dance 485

PLATES.

I. — Maidu Baskets. Figs. 1–5.
II. — Maidu Baskets. Figs. 1–5.
III. — Maidu Baskets. Figs. 1–4.
IV. — Maidu Baskets. Figs. 1–5.
V. — Maidu Baskets. Figs. 1–5.
VI. — Maidu Baskets. Figs. 1–4.
VII. — Maidu Baskets. Figs. 1, 2.
VIII. — Maidu Baskets. Figs. 1–4.
IX. — Maidu Baskets. Figs. 1–6.
X. — Maidu Baskets. Figs. 1–3.
XI. — Maidu Baskets. Figs. 1–5.
XII. — Maidu Baskets. Figs. 1–4.
XIII. — Maidu Baskets. Figs. 1–5.
XIV. — Maidu Baskets. Figs. 1–5.
XV. — Maidu Baskets. Figs. 1–5.
XVI. — Maidu Baskets. Figs. 1–4.
XVII. — Maidu Baskets. Figs. 1–8.
XVIII. — Pit River Baskets. Figs. 1–6.
XIX. — Pit River Baskets. Figs. 1–6.
XX. — Pit River Baskets. Figs. 1–6.
XXI. — Pit River Baskets. Figs. 1–5.
XXII. — Pit River Baskets. Figs. 1–6.
XXIII. — Wintun Baskets. Figs. 1–8.
XXIV. — Wintun Baskets. Figs. 1–8.
XXV. — Yana and Moquelumnian Baskets. Figs. 1–4.

XXVI. — Moquelumnian Baskets. Figs. 1–5.
XXVII. — Pomo Baskets. Figs. 1–9.
XXVIII. — Pomo Baskets. Figs. 1–7.
XXIX. — Pomo Baskets. Figs. 1–5.
XXX. — Pomo Baskets. Figs. 1–3.
XXXI. — Pomo Baskets. Figs. 1, 2.
XXXII. — Pomo Baskets. Figs. 1, 2.
XXXIII. — Pomo Baskets. Figs. 1–4.
XXXIV. — Pomo Baskets. Figs. 1–3.
XXXV. — Pomo Baskets. Figs. 1, 2.
XXXVI. — Pomo Baskets. Figs. 1–4.
XXXVII. — East African Baskets. Figs. 1–7.
XXXVIII. — Map showing Location and Subdivisions of the Maidu and Surrounding Tribes and the Principal Villages of the Maidu.
XXXIX. — Portions of Netted Caps, or Wīka′, showing Different Designs ($\frac{50}{276}$), ($\frac{50}{203}$). Lengths, 39 cm., 40 cm.
XL. — Feather Cape worn in Dances ($\frac{50}{192}$). Length, 108 cm.
XLI. — Feather Cloak worn in Dances ($\frac{50}{3130}$). Length, 176 cm.
XLII. — Necklace of Modern Bead-work, with Abalone Pendants ($\frac{50}{5259}$).
XLIII. — The Kùm, or Earth-lodge Dance-house at Chico, Cal.
XLIV. — Interior of Dance-house. Main Post in Background, Front Post in Foreground.
XLV. — Höbo′, or Bark and Brush Hut, of the Sierra and Foot-hills.
XLVI. — Interior of Burning-ground near Mooretown, Butte County, showing Portion of Brush Enclosure and Graves.
XLVII. — Poles with Clothing and Baskets attached. Burning Ceremony near Mooretown, 1904.
XLVIII. — Image for a Man, used at the Burning Ceremony ($\frac{50}{4032}$a). Height, 100 cm.
XLIX. — Image for a Woman, used at the Burning Ceremony ($\frac{50}{5241}$a). Height, 97 cm.
L. — Bill Brooks (No. 22, p. 360), Age 70. Maidu Man of Foot-Hill Region.
LI. — Dan Wright (No. 17, p. 360), Age 55–60. Maidu Man of Foot-Hill Region.
LII. — Walter Uptograth (No. 15, p. 360), Age 45. Maidu Man of Foot-Hill Region.
LIII. — Lawson Anderson (No. 11, p. 359), Age 40. Maidu Man of Foot-Hill Region.
LIV. — Mosy Higgins (No. 55, p. 363), Age 27. Maidu Man of Mountains.

LV.— Johnny Bob (No. 54, p. 363), Age 20. Maidu Man of Mountains.
LVI.— Johnny Pai yute (No. 52, p. 363), Age 20. Maidu Man of Mountains.
LVII.— Frank Louhead. Southeastern Maidu Man.
LVIII.— Henry Clay (No. 12, p. 359), Age 40–42. Maidu Man of Foot-Hill Region. Round-Mountain Jack. Yana Man.
LIX.— Map showing Location and Subdivisions of the Shasta and Surrounding Tribes and the Principal Villages of the Shasta.
LX.— Shasta Baskets. Figs. 1, 2.
LXI.— Shasta Baskets. Figs. 1–3.
LXII.— Shasta Baskets. Figs. 1–4.
LXIII.— Shasta Baskets. Figs. 1, 2.
LXIV.— Shasta Baskets. Figs. 1–3.
LXV.— Shasta Baskets. Figs. 1–3.
LXVI.— Shasta Baskets. Figs. 1, 2.
LXVII.— Shasta Baskets. Figs. 1, 2.
LXVIII.— Shasta Baskets. Figs. 1, 2.
LXIX.— Shasta Baskets. Figs. 1, 2.
LXX.— Shasta Baskets. Figs. 1, 2.
LXXI.— Shasta Mat.
LXXII.— Painted Buckskin.

BULLETIN

OF THE

AMERICAN MUSEUM OF NATURAL HISTORY.

VOLUME XVII, 1902.

I.—BASKETRY DESIGNS OF THE INDIANS OF NORTHERN CALIFORNIA.

By ROLAND B. DIXON.

PLATES I–XXXVII.

ONE of the earliest-noted and prime characteristics of the Indians of California is the great development among them of the art of basket-making. Not only did they excel in technique, in producing water-tight baskets of both the coiled and twined varieties, but also in the extent to which they developed the purely artistic side of basket-making in the elaboration of designs and methods of ornamentation. Carving and painting were, as far as we know, not numbered among the arts of this portion of the Pacific coast; pottery was unknown; and decoration in dress was, if we except the feather ornaments used at dances, as a rule, of the simplest sort in comparison with the elaborate and often profuse decoration found among many of the Indians of the plains. The California Indians were, therefore, practically confined, for the expression of their artistic sense, to basketry alone; and possibly this concentration of effort will afford a partial explanation, at least, of the great perfection to which the art was carried.

But, while we find that basket-making and basketry design and ornamentation are characteristic of the California Indians as a whole, these arts were not developed to the same extent, or along the same lines, in all parts of the region. We can, in consequence, distinguish several more or less clearly defined areas, each of which has a somewhat characteristic type of basketry and design. There is, of course, much intergrading, much that is difficult to classify; but on the whole the type areas are quite clearly distinguishable. Leaving the more detailed discussion of these type areas till later, it will be sufficient to outline briefly the different areas proposed. Beginning at the north, we have what might be called the Northwestern Type, which includes the area occupied by the Hupa (Athapascan), Karok (Quoratean), Yurok (Weitspekan), and perhaps the Shasta (Sastean). The Northeastern Type would comprise the Modoc and Klamath (Lutuamian), Shasta (?), Pit Rivers (Palainihan), Yana (?), Wintun (Copehan), and Maidu (Pujunan). The Pomo Type is confined apparently to this stock (Kulanapan). The relations of the Yuki (Yukian) and Costanoan are still doubtful. This division must be regarded as only provisional, and further study and material may serve to alter it here and there.[1]

Each type area includes, as a rule, several distinct groups of tribes, each group possessing, as will be seen, its own distinctive type of design. In discussing the designs, therefore, each group will be considered separately, beginning with the Maidu, in regard to which the information is most complete.

DESIGNS OF THE NORTHEASTERN AREA.

MAIDU. — The Indians of this stock occupied the region which may be described roughly as lying east of the Sacramento River, extending as far as the Nevada line, and stretching north and south from the southern line of Lassen and Tehama Counties to the Cosumnes River. A brief description of a number of designs from this stock has already been given elsewhere.[2] Further collections from all parts of the Maidu territory have afforded a large amount of new material; and, though it is probable that there are other designs in use by these Indians, the present enumeration may be regarded as fairly complete. Following the plan adopted in the preliminary description, the designs found on the baskets may be divided into three groups, according to the object said to be represented: (1) Animal designs, (2) Plant designs, and (3) Designs representing various natural or artificial objects.

---

[1] The majority of the baskets the designs of which are here discussed belong to the second or Northeastern Type, and were collected during the years 1899 and 1900. A few baskets are included from the Southeastern Type for comparison, although the meaning of the designs was not obtained. The Pomo baskets are from a collection purchased by the Museum, and the meanings of the designs are those given by the collector, Mr. Carl Purdy.

[2] R. B. Dixon, Basketry Designs of the Maidu Indians of California (American Anthropologist, N.S., Vol. II, pp. 266–276).

1. *Animal Designs.*— One of the commonest designs on baskets from all parts of the area occupied by the Maidu is that of the quail, or more properly the quail-tip. The characteristic feature of the bird (the head-plume) is represented by a vertical line, the end of which is bent at right angles, and somewhat enlarged. On Plate I, Fig. 1 (Butte County), a very characteristic form of the design is shown, and a more elaborate form, apparently only found in the southern portion of Maidu territory, is shown in Figs. 2, 3 (Placer County). This design seems to be confined exclusively to baskets of the coiled type.

Quite rare, and very local in its distribution, is the design known as "duck's wing" (Plate I, Fig. 4, Plumas County). The basket here shown is of considerable age, and is the only example seen of this design, which is said to typify the patch of white seen on either side of the bird. Of equal rarity, and occurring within the same limited area, is what is called an "eye" (Plate I, Fig. 5, Plumas County). There is here some resemblance to be noted to the design known as "longko" or "diamond" (Plate XIII, Fig. 2); but, at least in this region, the two forms are regarded as distinct.

All members of the Maidu appear to use a design representing an earthworm or caterpillar. One of the simplest and commonest forms, a series of single parallelograms of solid color linked together by the corners, is shown on Plate II, Fig. 1 (El Dorado County). A slight variation in the design as applied to the flatter plaque-baskets is shown in Fig. 2 (Butte County). Still another treatment is that in Fig. 3 (El Dorado County). In this case it was said that the banded parallelograms signified the striped caterpillar. With these is classed, because of similarity, a design of rather uncertain significance (Fig. 4, Butte County). The only explanation which could be obtained for this was "big tongues."

The design known as "gray squirrel's foot" (Plate II, Fig. 5, Butte County), is similar to two others of different significance occurring farther to the north. The design has but a small range, and seems restricted to the Northern Maidu exclusively. Confined apparently to the Maidu of the Sacramento Valley about Chico is the fish-teeth design (Plate III, Fig. 4, Butte County). The intent here is to show the wide-open mouth of the fish, and, viewed from below, the resemblance is quite striking.

Designs representing snakes seem to be restricted entirely to the Southern Maidu, particularly to those in Placer and El Dorado Counties. On Plate III, Fig. 1, we have the rattlesnake, a design which occurs again in Fig. 3, the diamond-shaped figures here being hollow, and combined with the arrow-point design, further examples of which will be given later. The diamonds in these designs seem to be an imitation of the spots on the common rattlesnake of the region, *Crotalus lucifer*. Beside the rattlesnake, we find also the water-snake. This is shown, as applied to a plaque, in Fig. 2, and on large soup-baskets on Plate IV, Figs. 4, 5. It is probable that the design on the two unfinished baskets shown on Plate XVII, Figs. 1, 2, is the same.

On Plate IV, Fig. 1 (El Dorado County), we have a design not common, but evidently widely spread. This is the milleped or thousand-legged worm, the many small triangular appendages to the zigzag line being the many feet of the creature. Plate IV, Fig. 2 (Butte County), shows the same design on a basket of much better workmanship, and Fig. 3 (Placer County) shows what is apparently the same design, which here, however, is explained as the fly.

The butterfly pattern (Plate V, Fig. 1, Butte County) is said to represent the wing pattern of a species of large yellow butterfly. A smaller butterfly is said to have its wing pattern shown on the basket figured on Plate V, Fig. 2 (Butte County); it is, however, strongly suggestive of the rattlesnake design on Plate III, Fig. 1. In the same group with the butterfly should be mentioned the moth-miller (Plate V, Fig. 5, Placer County). The spread wings of the moth are said to be represented in this design, which is apparently confined to the Southern Maidu. Its resemblance to the black-oak on Plate IX, Fig. 3, to the spool pattern of the Wintun (Plate XXIV, Fig. 1), and to the pine-cone (Plate XX, Fig. 1) of the Pit Rivers, may be noted.

Among those designs having a very limited range is that of the raccoon (Plate V, Fig. 3, Butte County). This is the only specimen of the design seen, and is explained as representing either the stripes on the animal or the *os penis*. The real origin of the basket shown in Fig. 4 is not certain. Although in the possession of the Indians of the Maidu stock in Big Meadows, Plumas County, and claimed by them to have been made there by Indians of that stock, there are reasons for supposing that it may be a Pit River basket, although possibly only a good instance of the adaptation of Pit River designs slightly modified. The design on the body of the basket is said to be flying geese, the triangles and rhomboids in their arrangement typifying the flight of the bird. The design around the edge is said to represent mountains (compare Plate XXII, Fig. 5).

Three of the designs shown on Plate VI, representing the grasshopper leg or foot, are more widely variant than any others seen. In all three cases the meaning of the design was given confidently. The type prevailing among the Southern Maidu is that in Figs. 1, 2 (Nevada and El Dorado Counties). Among the Northern Maidu in the high Sierra, the form shown in Fig. 3 (Plumas County) is the one in use, but it is a design which, so far as observation shows, is seldom used. In the Sacramento Valley villages of the Northern Maidu, however, still another form is customary (Fig. 4, Butte County). Here it was pointed out that the lines bent at an angle denoted the bent leg of the grasshopper. It seems not impossible that the form shown in Fig. 3 may be genetically related to that in Figs. 1, 2; and further search may show intermediate stages in this development. All three of these, however, seem to differ considerably in intent from Fig. 4.

2. *Plant Designs.* — One of the noteworthy features of Maidu

decorative art is the unusually large number of designs which are said to represent plants of some sort. On Plate VII, Fig. 1 (Butte County), we have what is called simply a "plant," no more specific description being obtainable. The basket itself is a very old one, certainly fifty years old, if not more. What is described as a vine is shown in Fig. 2 (Plumas County) and again on Plate VIII, Fig. 1 (Butte County), here, however, with slight variations. The spiral character of this design is supposed to represent the twining of the vine about a pole, the points being the individual leaves protruding on each side. As far as known, this design is confined exclusively to the Northern Maidu. The common brake (*Pteris aquilina*) is shown on Plate VIII, Fig. 2 (Butte County). The points are here said to represent the pinnæ of the fern; the significance of the striped central bar is, in spite of further inquiries, still unknown. This design also seems to be restricted to the Northern Maidu.

Two other northern designs are those shown in Figs. 3, 4 (Butte County). The former was declared to be a tree, but of what species was not known, although it was suggested that it was most probably the sugar-pine. This would seem reasonable, inasmuch as the pendants from the ends of the horizontal arms in the design might very well stand for the beautiful drooping cones of this most attractive tree. The so-called "flower" design occurs in Fig. 4, and is of quite frequent occurrence on baskets from the Konkau and other Maidu of the northern Sacramento Valley. The design here is somewhat irregular, but represents the overlapping petals of a flower, the resemblance being most striking, as in the case of the fish-teeth, when the basket is viewed from below.

Local again in distribution, at least with this meaning, is the yellow-pine (Plate IX, Fig. 1, El Dorado County). The portion of the tree selected for representation is not known. The very close similarity of this design to that shown on Plate XIV, Fig. 3, there explained as animal tracks, is worthy of note. With the large pack-basket shown on Plate IX, Fig. 2 (Plumas County), we return again to a northern design. This is known as the "pine-cone," and is one of the most effective designs of the series. In this the sharp, horizontally directed points represent the strong spines of the large pine-cone of the region. The design about the upper edge seems to be the main design but half carried out, and is said to represent mountains. If, however, we compare these designs with the lizard and owl's claw on Pit River baskets (Plate XIX; Plate XXII, Fig. 5), the very strong similarity is at once apparent, and we are led to the conclusion that in this basket we have either a Pit River basket, or a remarkably good case of borrowing a Pit River design. It would not be impossible for the basket to be really from the Pit River Indians, for it was obtained in Big Meadows, on the very borders of Palainihan territory.

On Plate IX, Figs. 3, 4 (El Dorado County), are two plant designs explained respectively as the black-oak (*Quercus Kelloggii*) and white-oak (*Quercus lobata*). These designs are confined to the southern part of the Maidu region, and what portion of the trees in question are represented is not known. The similarity of these designs to others within the stock is noticeable. Fig. 5 (Plumas County) is explained as bushes or brush, and Fig. 6 (Plumas County) as either bushes or flowers; but in regard to this latter the identification was very uncertain. The similarity of the former to the gray squirrel's foot, etc., should be noted.

3. *Designs representing Natural or Artificial Objects.* — The third group of designs is that which includes all representations of natural or artificial objects, or the phenomena of nature. One of the commonest, not only of this group, but of all the designs met with, is that known as the "feather," or sometimes "arrow-feather." On Plate X are shown three examples of a simple type of this design: Fig. 1 (El Dorado County), as it occurs in the south, and Figs. 2, 3 (Butte County), the prevailing forms in the Sacramento Valley villages of the Northern Maidu. The intent in all cases is to depict the feathers used on the war arrows, which were thus notched with great regularity. More complicated forms of this design, the details of which are not yet clear, are shown on Plate XI. Only a single example was seen of the type of Fig. 1 (Butte County),

the H-like figures in the central stripe being quite unusual and unexplained. Another variant is that in Figs. 2, 5 (Plumas County), here associated with the quail-tip design, which forms the triangular figure in the centre about the rim. The pack-basket, Fig. 3 (Plumas County), shows a simple form of the design more like those on Plate X; and Fig. 4 (Plumas County) presents still a fifth type of the design, with an irregular figure of unknown significance inside the "point."

Without doubt the most frequently used of all designs is the arrow-point or flint. Throughout the whole Maidu area this design seems to predominate, and while varying in a number of ways, yet it is almost always easy to recognize. A rather common form of the design in the south is that on Plate XII, Fig. 1 (Placer County). Another type occurs in Fig. 2 (Plumas County). Here in this Northern Type the arrow-points are doubled, being placed base to base. In Fig. 3 (El Dorado County) is another and simpler treatment, and in Fig. 4 (Butte County) a rather striking arrangement in spirals. In all these cases the design seems to be differentiated from the simpler forms of the feather by the fact that the triangles are typically isosceles and have their bases or shortest sides horizontal, whereas the triangles in the feather design are rarely isosceles, and have their bases or shortest sides vertical or oblique. A simple form recalling Plate XII, Fig. 2, is that on Plate XIII, Fig. 1 (Plumas County). Here the points are placed base to base as in the other design, but actually in contact, and are linked as before by narrow lines. Plate XIII, Fig. 2 (El Dorado County), shows a very pleasing symmetrical arrangement of these double points standing singly, and is also remarkable as being one of the two examples, out of many hundreds of baskets seen, in which the groundwork of the design is dark; all others, without exception, having dark designs on a light background. Another symmetrical treatment occurs again in Fig. 3 (Butte County), and serves apparently as a transitional form to the simple zigzag in Fig. 4 (El Dorado County), which is one of the common forms of the arrow-point in this region. A very odd design occurs on the plaque-basket in Fig. 5 (Plumas County), and was identified positively with the arrow-point by the woman from whom the basket was obtained. No other examples of this design were seen anywhere, and its very considerable divergence from the rather coherent body of arrow-point designs as a whole, is quite marked. An example apparently of the arrow-point design is that on Plate XIV, Fig. 1 (Plumas County). Here the design about the edge is the simple zigzag, and is unquestionably the arrow-point. Beneath this is another design in which the zigzags vary greatly in length. This design is not a Maidu design, and is not understood by them, but is distinctly stated to be copied from the baskets of people living to the southward, in all probability the Washoe. It is interesting to note, that, in this case of a clearly borrowed design, no attempt seems to be made to invent a meaning.

For the design shown in Fig. 2 (Butte County) no other explanation could be obtained than that it represented an oblong or diamond, the same word ("longko") being used to describe any other diamond-shaped figure, as, for example, the diamonds in a pack of cards. In Fig. 3 (Butte County) the design is that known as "animal tracks," the particular animal being very uncertain. The branching of the pattern from the apices of the "points" is said to mean that the "track runs both ways." The design is of moderate frequency among the Northern Maidu.

Of rare occurrence, and very local in distribution, is the design called "mountains and clouds," shown in Fig. 4 (Plumas County). Here the superposed triangles represent a mountain-range seen end on, in perspective, the short vertical lines being trees. The clouds are represented by the zigzag about the edge of the basket; but this is practically identical with the zigzag explained as arrow-points in other cases. A rather asymmetrical and curious design is that in Fig. 5 (Butte County), said to be "something turning round." This is combined with arrow-points also.

Wood in sticks or billets is shown on Plate XV, Fig. 1 (Placer County), and again in Fig. 2 (El Dorado County). The latter, especially, strongly recalls the big-tongue on Plate II, Fig. 4, and also the earthworm. A pair of tongs is said to be represented in Fig. 3 (Butte County), the allusion being to the split sticks used for removing heated stones from the fire in order to put them in the acorn-soup, for the purpose of cooking it. In Fig. 4 (El Dorado County) we have a representation of beads, while the somewhat similar design on a basket of much coarser make (Fig. 5, El Dorado County) is said to be a trail or path.

This completes the list of designs known with any certainty; but the following designs, although for the most part unexplained, are given, in order to have as large a collection as possible for comparison.

On Plate XVI are one or two, the meaning of which is still a mystery. Fig. 1 (El Dorado County) may be either a hornet or a tree. Fig. 2 (Nevada County) is completely unknown. Fig. 3 (Butte County) is identical with the fern of Plate VIII, Fig. 2, with the addition of the small triangles. Fig. 4 (Plumas County) is probably feather and arrow-point, although, in the absence of definite statement to that effect, this identification must be regarded as only provisional. Plate XVII also shows a number of designs the meaning of which is unknown or uncertain. Figs. 1, 2 (El Dorado County), are probably partly finished water-snakes, while Fig. 3 (El Dorado County) is apparently the feather (?), but very roughly made. The significance of Figs. 4 (Placer County), 5 (Plumas County), 6 (El Dorado County), is completely unknown, the last strongly suggesting a more southern origin, perhaps, with Fig. 3, in the Moquelumnian area. The curious and intricate design appearing in Fig. 7 (Butte County) seems to have arrow-points about the rim; but the main design is entirely unexplained, inquiries failing to elicit any information in regard to it. Fig. 8 (Plumas County) is of interest, for, although unexplained, it seems to show the deer-gut design so common among the Pit Rivers, and to be another case of borrowing or copying a design from some other stock.

Having now described and considered in some detail the various designs in use among the Maidu stock, there remain several more general considerations suggested by the study of the designs as a whole. In the first place, it is quite clear that the designs are not rigidly fixed, but are subject to considerable variation. In some cases, as in the quail-tip (Plate I), the feather (Plates X, XI), and the arrow-point (Plates XII, XIII), the variation is effected chiefly by a different arrangement of the characteristic features of the design,—features which seem to remain quite constant throughout the entire stock, and to be more or less easily recognizable in all their modifications. In other cases, as, for example, the grasshopper-foot (Plate VI), we have apparently two types: Figs. 1, 2, 3, forming one, and Fig. 4 the other. The first of these types varies considerably, it is true, but may, I believe, be regarded as substantially the same in intent. In cases of this sort, where two or more different types for the same design occur, we never find both types in use in the same region apparently, either one or the other being consistently used all through a given area.

As regards variation in design depending on differences in weave, little can be said, since the very great majority of baskets now made by the Maidu are of the coiled variety alone. Only the pack-baskets are of the twined or woven variety, and of these but few are now made. The grasshopper-leg design on the pack-basket shown on Plate VI, Fig. 4, does not occur, so far as known, on baskets of the coiled variety, and this constitutes the only satisfactory case of woven-basket designs. In the other instances of woven baskets (Plate V, Fig. 4; Plate VII, Fig. 2; Plate XI, Fig. 3) there is some question whether they are genuine Maidu baskets; but, granting that they are all undoubtedly Maidu in their origin, we have only the feather common to both coiled and woven varieties, and this does not appear to differ to any extent. From these few and rather unsatisfactory instances, then, it would seem that the design was essentially the same, whether on coiled or woven baskets.

To some slight extent there is evidence of a restriction of certain designs to certain types of baskets; the quail, fish-teeth, moth-miller, vine, and fern not occurring, so far as known, on plaque-baskets or trays, but being restricted to soup-baskets only. On the other hand, the earthworm, water-snake, milleped, feather, and arrow-point seem to be used indiscriminately on baskets of both types.

In the arrangement and grouping of designs there is a strongly marked preference for the spiral and zigzag line, the designs running either in equidistant spirals from top to bottom of the soup-baskets and in whorls on the plaques, or in a series of "points" placed symmetrically about the centre of the basket, forming a star. These differ as to the number of points; but three or four, more generally the former, is the rule. The arrangement of the design in a series of horizontal parallel bands is quite unusual, although it does occur in a few examples.

The distribution of the designs within the area occupied by the stock discloses one or two points of interest. Apparently of universal distribution and also of most frequent use are the quail-tip, feather, and arrow-point. One can hardly find a family anywhere among whose baskets one of these designs is not represented, or, perhaps, all. Less frequently used, but also known to all the stock, are the earthworm (and the similar wood or big-tongue designs), milleped, grasshopper-leg, etc. Of more local character, but still with a fairly wide distribution, are such designs as the rattlesnake and water-snake, confined apparently to the Southern Maidu; or the vine, in use only by the northern sections. Still more local are many of the other designs, such as the duck's wing, squirrel's foot, fish-teeth, moth-miller, tree, flower, etc., which are, so far as known, confined to single valleys or even villages. Of course, one can never be certain that a design is of local occurrence only; for many designs have died out locally, in all probability, or, even if still in use, the baskets on which they occur may have been overlooked. Except so far as the first cause of error is concerned, the distribution as here given is probably fairly accurate, as a record was kept of all baskets which could be found in every village and house visited, the whole number of baskets seen amounting to several hundred. Owing to the much smaller number of Indians in the southern part of the Maidu region, it is not quite fair to compare the number of designs in use in the northern area with those in the southern; still, allowing for the scant population and the probability that as a consequence several designs have here become locally extinct, there seems to be a difference between the two areas. The total number of designs found north of the Yuba River is twenty-two (or twenty-four, including the two doubtful instances); of these, ten are representations of animals, five of plants, and seven of natural or artificial objects. South of the Yuba, only sixteen designs were found, of which eight represent animals; three, plants; and five, natural or artificial objects. These figures would seem to show a slightly greater paucity of designs in the southern section, with about the same relative proportion of the different types of design. The total number of designs in use by the stock as a whole amounts to something over forty.

Taken as a whole, the designs of this stock would seem to be characterized by a considerable conventionalization. In most cases the intent of the design is not clear from mere inspection, but must be explained before it can be understood. There are one or two designs, however, which, in so far as the nature of the material and the art will allow, are almost as realistic representations of the objects as one could expect. Such, for example, are the quail-tip, fish-teeth, milleped, feather, etc. Here, however, the object is, as a rule, so extremely simple, that, even although the design is a moderately good representation, it might pass equally well as the representation of something else. This "obscure realism," as it might be rather contradictorily termed, seems to be of moderate frequency in the designs.

In several instances, as, for example, in the linked parallelograms, what is virtually the same design receives different explanations among different members of the stock. Such designs are usually the most simple ones, and might be classed with the obscurely realistic designs just referred to. The bearing of these cases on the general problems of design will be referred to again later.

One of the most striking characteristics of the Maidu, as compared with other stocks, is the very strong tendency to put but one design on a basket. There are four or five cases, in the seventy or more baskets here shown, in which more than one design is used. This proportion is certainly too large, the number of cases in which more than one design occurs on a basket averaging more nearly three out of a hundred. The distinctiveness of this characteristic will be apparent as the designs of the other stocks are taken up.

To sum up, then, the characteristic features of Maidu basketry-designs may be said to be the very large variety and number, the frequency of animal designs and the unusual predominance of plant designs, the considerable number of designs in which there is a more or less obscure realism, the strong tendency shown toward an arrangement in spiral or zigzag lines, and the well-nigh universal practice of putting but a single design on a basket.

PIT RIVER. — The Indians commonly known by this name, and belonging to the Palainihan linguistic stock, occupy the greater part of the valley and drainage basin of the Pit River in northeastern California, and are the immediate northern neighbors of the Maidu. The designs here given form but a portion of the whole body of design known to the stock, collections from this region not being as complete as from the Maidu area to the south. It will be noticed, that, whereas the Maidu make baskets of both the coiled and woven varieties (although principally of the former), the Pit River baskets are all, so far as known, of the woven type. Dividing the designs into groups as far as possible, we may again begin with —

1. *Animal and Plant Designs.* — Among the many peculiar and unique designs in use by these Indians is that known as "mussel's tongue" (the fresh-water mussel), shown on Plate XVIII, Figs. 1, 2, 3. One of the commonest forms is that in Fig. 1, which has combined with it, as a rim around the edge of the basket, the arrow-point. Fig. 2 shows another form of the design, combined here with the stripe. In Fig. 3 the design appears again, here subordinated to the pine-cone, represented by the hour-glass figures, which predominate in the ornamentation.

The design in Fig. 4 is known as "skunk," perhaps combined with arrow-point. Whether this is the track of the animal, or refers to some part of it, or a marking, could not be discovered. Strongly resembling some of the Maidu designs is that known as "fish-tail," shown in Fig. 5, the larger terminal triangle being apparently the characteristic feature. The sharp zigzags in Fig. 6 represent a bent knee. Of much greater frequency, it seems, is the design shown on Plate XIX, Figs. 1–4. Of these, Figs. 1, 2, are declared to be the lizard, or lizard-foot, in Fig. 2 in combination with the diamond. The characteristic motive of this design appears again in Fig. 3, here, however, explained as the eye. It seems probable, however, that the central portion only of the figure is the eye, and that the border is again the lizard. In Fig. 4 the design (the same as that in Fig. 1) is declared to be the quail. About the rim of this basket we have the hill, or, as otherwise explained, the bear's foot. This alternates with the mussel's tongue, seen here to the extreme right. Below the lizard or quail design is another, in a series of points, about the very bottom, this being known as the "meadow-lark's neck," being a representation of the collar, or V-shaped mark, on the throat of the bird in question.

Suggesting somewhat the similarly named Maidu design is the flying-geese pattern shown in Figs. 5, 6. The design is simpler than the Maidu form, but, at least in Fig. 5, suggests fairly well the appearance of geese in flight. Plate XX, Fig. 1, is also, probably, the same design, to which has been added the pine-cone. The design in Fig. 2 is one of the few which are representative of plants, this being said to be bushes or brush of any kind. The only other plant design is the pine-cone already alluded to, shown in Fig. 1 and on Plate XVIII, Fig. 3.

2. *Designs representing Natural or Artificial Objects.* — On Plate XX, Figs. 3, 4, 6, we have what is called "intestines," or more specifically given sometimes as "deer-gut." There seem to be two slightly different forms of this design, although the continuous bent line seems to be the fundamental feature. Figs. 3, 6, are said to be combinations of the deer-gut with the arrow-point. Somewhat similar, superficially, is the deer-rib shown in Fig. 5, here said to be combined with the arrow-

point, as in the case of the deer-gut. Both deer-rib and deer-gut are very common designs, and may occur without the accompaniment of the arrow-point. Without doubt, the goblet-shaped form of Fig. 5 is not native, but is merely a copy of similarly shaped objects seen in the possession of the whites.

Another design of very frequent occurrence, and susceptible of several modifications, is that known as "deer-excrement," shown on Plate XXI, Figs. 1, 2, 3, in the last instance together with the so-called "rough" or "crooked" design. This is rather strikingly suggestive of the simpler forms of the Maidu feather, and is shown in Fig. 4 in combination with the familiar arrow-point, which occurs again in Fig. 5.

Plate XXII shows several designs the meaning of which is more or less in doubt. Fig. 1 is completely unknown. Fig. 2 is possibly the arrow-point, or perhaps flying geese (?). In Fig. 3 the design is, without doubt, the skunk-nose; while Fig. 4 is the arrow-point again. The design in Fig. 5 is explained variously as lizard (compare Plate XIX, Figs. 1–4) and as owl's claw. Fig. 6 is said to be flying geese, but the determination is very doubtful.

In so far as may be judged from the material at hand, the designs of this stock are subject to considerable variation in the mode of arrangement, shown here especially in the case of the deer-excrement and mussel's tongue. Variation depending on difference in make is here negligible, as no baskets of the coiled type are made. So far as noted, there is no restriction of certain patterns to certain types of basket. In the arrangement and grouping of designs, there is, as in the case of the Maidu, a very strong tendency toward spiral and zigzag lines, with the addition of the use of vertical or radial lines, as on Plate XVIII, Fig. 4; Plate XXI, Fig. 1; Plate XXII, Figs. 2, 5. Horizontal bands are rare, as in the case of the Maidu. The question of the distribution of the designs must wait for fuller material; but their relative frequency within the small area visited shows that the most common are the deer-rib, deer-gut, lizard, and owl's claw, followed closely by the eye, deer-excrement, flying geese, and crooked or zigzag lines

Even in the limited area so far studied, it is noticeable that in one or two cases, if not more, the same design receives a different explanation from different individuals, which is contrary to the rather remarkable uniformity of explanation among the Maidu, over considerable areas. In the nature of the designs there seems to be, perhaps, a slightly greater tendency toward conventionalization than is to be seen among the Maidu, and, as compared with these in the matter of the number of designs on the basket, there is a marked increase in the tendency to use several designs instead of one.

From the foregoing, it would seem that, as a group, the designs in use by this stock are characterized by a considerable variety and number (falling considerably short of the Maidu, however, in this regard), by the marked frequency of animal designs (absence of snake designs) and the equally marked infrequency of plant designs, by the considerable variation of some designs within small areas, by a greater tendency toward grouping several designs on a single basket, and, while preferring the spiral or zigzag arrangement, varying this with that in vertical and radial lines.

WINTUN. — The Copehan stock, to which these Indians belong, occupies that portion of the Sacramento Valley lying west of the river, from the mouth to the neighborhood of Redding, north of which it spreads considerably to the east, occupying all the head-waters of the river, and extending westward into the region of the Upper Trinity. The stock thus covers a large area, and is the western neighbor of both Maidu and Pit River peoples. As in the case of the latter, the art of making coiled basketry seems not to be practised by the Indians of the Copehan stock, at least not by the Wintun branch. The designs here shown[1] are probably but a portion of those in existence. Grouping them as far as possible into classes, we have, —

1. *Animal Designs.* — On Plate XXIII, Fig. 1, we have for the body of the design the bent elbow, and about the base arrow-points. It is probable that the points on the bent

---

[1] The baskets here figured were obtained in the vicinity of the Sacramento River, in the region above Red Bluff.

elbow are also arrow-points. The sucker's tail is shown in Fig. 2. Almost identical with the design known to the Pit River Indians as "deer-gut" is that shown in Fig. 3, here explained as a water-snake; while the rattlesnake's head is represented in Fig. 4. The wolf's eye is shown in Fig. 5. An obscure and rather complicated design, apparently, is that known as "flying geese" (Fig. 6), which occurs in a somewhat different form in Fig. 7. Here the body of the design is the flying-geese pattern, while about the edge is a row of arrow-points, and below, about the base, a row of rattlesnakes' heads (?). Fig. 8 seems to have an upper row of arrow-points, with the bear's foot below.

2. *Designs representing Natural or Artificial Objects.* — What is called simply the "empty spool" is shown on Plate XXIV, Fig. 1. This explanation is far from satisfactory, but at present no other can be given. Fig. 2 is given the same explanation. The design on the basket in Fig. 3 is declared to be "leaves strung along," and suggests at once the Maidu vine. The deer-excrement occurs in Fig. 4, in a somewhat different arrangement from that of either the Maidu or Pit River Indians. The diagonal stripes of Fig. 5 are stated to be "pulled around," alluding, apparently, to their spiral arrangement. Figs. 6, 7, are each explained as "striped;" while Fig. 8 is known as "crossways."

From the limited amount of material here presented, but few reliable conclusions can be drawn. We may note, however, that, in the matter of the arrangement of designs, while spiral and zigzag lines are common and horizontal bands are also quite frequent, vertical lines as used by the Pit River Indians, although sometimes met with, are rare. Of the thirteen designs here shown, more than half are animal designs, and but one is regarded as the representation of a plant. Although, as a rule, but one design is placed on a basket, yet we find instances where two or three are thus used.

The general characteristics of the stock would seem to be much the same as those of the Pit River or Palainihan; the chief difference being in the relative frequency here of snake designs, in the tendency to extremes in the grouping of the designs (the rule being either one or many), and in the distinctly greater tendency toward arrangement in horizontal bands.

YANA. — Indians of this stock are now so few in number, that it is difficult to secure any material of which one can be certain that it is native to the stock. In former times this stock occupied the region between Little Cow Creek and Mill Creek in Shasta and Tehama Counties, being surrounded by the Maidu, Wintun, and Pit River Indians. At present, but a handful of these interesting people survive, and they are much mixed with the Pit Rivers. On Plate XXV, Figs. 1, 2, are two baskets, of which only the second can be regarded as showing with any certainty a native design. In Fig. 1 we have the wolf's eye, recalling somewhat the similarly named design among the Wintun. The design in Fig. 2 is said to be a house. Inasmuch as the basket itself is of a different shape and type from those seen among the Pit River or Wintun, it seems more probable that we have here a real Yana design. Both were, however, declared, by the half Yana, half Pit River Indian from whom they were obtained, to be real native designs.

DESIGNS OF THE SOUTHEASTERN AREA.

The following baskets, obtained in Amador and Calaveras Counties, from Indians belonging to the Moquelumnian stock, are introduced here only for comparison of the designs as such, inasmuch as the meaning of the designs was unfortunately not obtained.

On Plate XXV, Fig. 3, we have a very simple design, suggesting the Maidu earthworm and the Pit River and Wintun deer-excrement. Fig. 4 would seem to connect itself with the water-snake and rattlesnake designs of the Southern Maidu. On Plate XXVI, Fig. 1, is a design comparable, perhaps, with the eye and diamond; while in Fig. 2 the quail-tip is exactly reproduced. Fig. 3, again, is comparable to several of the designs given in the previous pages. Of a quite different type, however, is the design in Fig. 4, — a design seemingly rather closely related to designs in use by Indians of the Mariposan stock farther to the south. In Fig. 5, also, we have a highly characteristic use of the simple zigzag,— a design which, in this shape, seems also to be more southern than northern in its affinities.

DESIGNS OF THE POMO GROUP.

The Indians of this stock occupied a considerable area to the west of the Wintun tribes of the Sacramento Valley, spreading over most of the Russian River region, and between it and the coast. Like the Maidu, the Pomo or Kulanapan tribes make both coiled and woven basketry, and their baskets have, as has been shown by Mason,[1] a remarkable number of forms. The Maidu were accustomed to decorate their baskets, to some extent, with interwoven feathers, and pendent and fixed bits of shell and beads, but never, apparently, reached anything like the perfection of the art to which the Pomo attained. Owing to the great extent to which several designs are combined on baskets from this stock, it is not possible to separate the baskets into classes as before; but to some slight extent we may preserve the same order of treatment.

Apparently quite common among the Pomo, is the quail or quail-tip design shown on Plate XXVII, Fig. 1. The design is here combined with the red mountains, these being the triangular figures; while the quail-tip is shown in the intervening space. A different treatment of the quail-tip is that in Fig. 2, the design here forming a fringe along the edge of the red mountains, and again slightly different in Fig. 3. In Fig. 6 the quail-tip occurs only on one side of the mountain design. The red mountains occur again in Fig. 4, in combination with the quail-tip and also with the spots on a fawn, represented by the linked parallelograms. Similar, except that the red mountains are in a double row, is the design in Fig. 5; and here, again, the quail-tip appears about the base, although in this form suspiciously similar to the zigzag on some of the pack-baskets. Fig. 7 contains the red mountains and also the buckeye (compare quail-tip). Red mountains occur again in Fig. 8, with the addition of the grasshopper-shoulder, and with the "meshes of a fishnet" about the extreme edge. Still another form of mountain is shown in Fig. 9, in combination with leaves about the base.

---

[1] O. T. Mason, The Technique of Aboriginal Basketry (American Anthropologist, N.S., Vol. III, pp. 109–139).

The familiar quail-tip appears again on Plate XXVIII, Fig. 1, here in combination with crossing trails; the same design apparently occurring again in Fig. 6. In Fig. 2 the crossing trails occur once more, combined with what is called "zigzag." The remaining designs in this group are not explained. Fig. 4 is strikingly suggestive of the Maidu flower design, and is here executed with great symmetry. Figs. 5, 7, are apparently to be regarded as local variations of the red mountains.

Associated, apparently, with the zigzag, we have the quail-tip again on Plate XXIX, Fig. 1, the quail-tip here occurring as a row about the edge. Fig. 2 surely, and Fig. 3 probably, is the zigzag alone; the latter being an especially effective treatment. A very good example of the arrow-point is that shown in Fig. 4. In Fig. 5 the crossing trails again make their appearance.

The large woven baskets of the pack-basket and storage types show a profusion of ornament; a very considerable number of designs, or repetitions of the same design, occurring on a single basket. On Plate XXX, Fig. 1, for example, the upper row, immediately about the edge, is meshes in a fishnet, and consists of a succession of parallelograms or squares. This is succeeded, in passing toward the base, successively by zigzag, red mountains, half arrow-points, red mountains and zigzag combined, zigzag, red mountains, and zigzag. In Fig. 2 the design is not explained; but in Fig. 3 we have again a long series, beginning at the top with meshes in a fishnet, zigzag, red mountains and zigzag, red mountains and zigzag, red mountains, zigzag. A simpler ornamentation is that on Plate XXXI, Fig. 1, in which the red mountains are arranged in a spiral, and the meshes in a fishnet again occur in a row about the rim. Fig. 2 shows again a combination of designs, beginning as usual with the meshes in a fishnet, and followed by zigzag, meshes in a fishnet, zigzag, zigzag, and lastly, apparently, the meshes in a fishnet again, although this is not certain. The designs on the two baskets on Plate XXXII are not explained, but seem to be combinations of red mountains and zigzags, with the usual meshes in a fishnet about the rim.

The large baskets used for storage, etc., show essentially the same designs. On Plate XXXIII, Fig. 1, we have the familiar red mountains and zigzag designs arranged in spirals. These occur again in Fig. 2, with the addition, probably, of arrow-points. The red mountains are also the dominant motive in Figs. 3, 4: the latter having again the zigzag, and presumably the arrow-point. All four of these baskets seem to have the meshes in a fishnet about the rim. Several designs, arranged in horizontal bands instead of spirals, are shown on Plate XXXIV, Figs. 1, 2. Fig. 1 has about the rim the meshes in a fishnet, and then, in succession, buckeye-trees, zigzag, red mountains, red mountains, crow's tracks. In Fig. 2, a very large basket, the designs are much the same, and occur in about the same order; viz., meshes in a fishnet, an unknown pattern, buckeye-tree, zigzag, red mountains, red mountains. Returning again to the spiral arrangement in Fig. 3, we find crossing tracks, zigzag, and red mountains, with the usual rim design. The meaning of the interlacing diamond figures is not given.

Two other large baskets of this same type are figured on Plate XXXV. Fig. 1 has the usual rim design followed by zigzag, red mountains, crow's tracks, and meshes in a fishnet. In Fig. 2 we have a striking treatment of the zigzag; the break in the design, known as the "dau," being filled with another figure. The plaque-baskets again present the same designs. On Plate XXXVI, Fig. 1, we see the arrow-point. In Fig. 2 we have, perhaps, the crossing tracks, strongly suggestive, however, of the empty spool among the Wintun, and the pine-cone among the Pit Rivers. Several varieties of the zigzag are shown in Fig. 4, apparently; and in Fig. 3 we find a simple treatment of the quail-tip once more.

From the preceding description of some of the designs in use among Indians of this stock, several general conclusions seem warranted. Variation in the designs is more or less noticeable, the zigzag having apparently the greatest number of divergent forms. Variations in design, due to differences in weave, may perhaps be noted in one or two cases; as, for example, the strongly rectangular form of the zigzag in the two coiled baskets shown on Plate XXIX, Figs. 1, 3, a form which seems to be wanting in baskets of the woven variety, where the angles are more acute. There is, apparently, a restriction of certain designs to certain weaves, inasmuch as the quail-tip, leaf, the particular form of crossing trails shown on Plate XXIX, Fig. 5, etc., are not seen on any of the baskets of the woven variety, except in the case of the quail-tip on Plate XXXVI, Fig. 3. The zigzag, also, seems very much more common on baskets of the woven than on those of the coiled variety.

In the arrangement of designs, the very frequent use of horizontal or concentric bands on all baskets of the woven type is the most noticeable, this form of arrangement occurring on half of the baskets here shown. In the case of coiled baskets, the arrangement in spirals, or vertical lines, seems to prevail. If we compare the number and character of the designs found on the forty or more Pomo baskets here shown, with those found on baskets of the other stocks here described, we are at once struck by the comparative paucity of designs; only eleven being here shown. In another series of thirty-five Pomo baskets, about six additional designs were found, giving a total of seventeen designs (from seventy-five baskets), as compared with thirteen in the case of the Wintun (from sixteen baskets), sixteen from the Pit Rivers (from thirty baskets), and more than forty from the Maidu (from seventy-nine baskets). Not only is this paucity of designs as a whole very noticeable, but the extraordinarily small number of animal designs is remarkable, only three of the designs here shown being traced to animal motives; while, on the other hand, more than half of the whole number of designs relate to natural or artificial objects. In all the other stocks here described, the preponderance of animal motives was very marked. In the Pomo, then, we have a people who had developed the art of feather decoration to a very high degree, but who were at the same time far behind the other stocks in the number and variety of the designs used. Perhaps the energy devoted to the elaboration of feather ornament drew the attention away from the development of new designs. But, be that as it may, the greatest manual dexterity and technical skill were here combined with the greatest artistic poverty.

A feature which differentiates the designs of this stock from all the others spoken of, is the existence in many cases — more particularly on baskets of the woven type, with spiral designs — of a gap in the design, filled by a design of a different sort. This break in the design, which is known as "dau," is said to be for the purpose of "letting the soul escape." The same break is found, if one may judge from a very few specimens only, also on the baskets of the Yuki, living immediately north of the Pomo, and in both cases suggests at once comparison with the similar openings left in designs on basketry and pottery in the Southwestern States. There are so few designs representing animals, that one can draw no very satisfactory conclusions as to the extent to which conventionalization has here progressed. It would seem, from what little material we have, however, that it had reached about the same stage as among the Maidu. As compared with the almost universal practice of the Maidu, of placing but one design on a basket, we find here exactly the opposite tendency; several designs, or repetitions of the same design, being the almost universal rule, the preference being for a considerable number, such as four or five.

The designs used by Indians of this stock, then, would seem to be characterized, as a whole, by their small number, by the great infrequency of animal designs, by the tendency to arrange the designs in a series of horizontal or concentric bands and to place a large number of designs on the same basket, and last, but not least in importance, by the occurrence of the "dau," or gap in the design, in many cases, and by the great development of feather decoration, which art was here carried to its greatest perfection.

Having described and attempted to characterize separately the designs of these several stocks, there remain certain generalizations which may be made from the material as a whole. It will be apparent, even from the most casual observation of the designs here shown, that there are a number of instances in which members of two or more different stocks have used the same design, or designs but very slightly differing from one another, sometimes with the same, sometimes with different meanings. Questions, therefore, very naturally arise as to the extent to which this goes, whether it is due to borrowing or to independent origin, and, if to borrowing, between which tribes the borrowing has been most extensive.

If the different designs here shown be tabulated without reference to the meanings offered for them, we find that there are really surprisingly few exact coincidences between tribe and tribe. Overlooking minor variations in form and arrangement, it is only the so-called "arrow-point," the linked parallelograms (variously explained as earthworm, wood, excrement, etc.), the crossing trails, and perhaps the hour-glass figure (known variously as pine-cone, moth, spool, etc.), which can be said to be found among all or most of the stocks here discussed. The quail-tip may, perhaps, be added to these, and probably the feather; but beyond these there are none which are of very wide distribution. It is noticeable, also, that it is only in the case of the quail-tip and arrow-point that the meaning of these more or less common designs is the same in different stocks. Except for the cases just noted, the chief examples of identity or similarity occur, as would be expected, between contiguous stocks. Thus the Southern Maidu show some points of similarity with the Moquelumnian stock, which, in its turn, seems allied to the Mariposan stock bordering it to the south. On the north, the Pit Rivers and Maidu seem to have some designs in common, especially if we admit as Maidu the two or three baskets of somewhat doubtful provenience, to which reference has already been made. The Pit Rivers, in their turn, show unmistakable relations with the Klamath Indians farther north. The Wintun, at least as far as at present studied, seem to be more closely affiliated to the Pit Rivers than to the Maidu, or other stocks with which they come in contact. The Pomo show one or two curious similarities with the Maidu (quail-tip, buckeye-tree, squirrel's foot), with whom, however, they were not in contact.

If we attempt to trace individual designs, we find that the lines of affiliation become much confused, and lead now here, now there. With material from the other stocks as full as that from the Maidu, it may be possible to trace in more detail the distribution and wanderings of some designs; but at present such an attempt would be premature. It was stated at the outset of this paper, that several fairly well-marked types or type areas might be distinguished, within which the designs were more or less coherent in their character. The time has not yet come for any detailed discussion of these, or for the final marking-out of the limits and boundaries of such regions. Yet I believe that we may, with some degree of certainty, regard the Maidu, Pit Rivers, Klamath, Yana (?), and Wintun, at least, as forming a group characterized by great variety and number of designs, predominance of animal and plant motives, etc., differentiating this group from the Pomo on the one hand (which exhibit such a paucity of designs and lack of animal motives) and the Southeastern Group on the other hand, which, simply from the designs as such, seems more related to the types of Southern California. Material in regard to the Northwestern Type or Group is not yet at hand; but, from a considerable number of baskets seen, it is clear that its affinities are with the Northeastern Group, and especially with the Wintun and Pit Rivers. Yet, in spite of rather close affinities to these, the Northwestern Group seems to have sufficient character to stand alone. All definitive conclusions as to type areas and relationships must wait, however, for fuller material.

To return to the matter of the separate stocks whose designs have been here discussed, we find that, as a whole, it is clear that each stock is in possession of a body of designs the greater portion of which seem to be peculiar to the stock and characteristic of it; so much so, that the occurrence of any one of these designs on a basket is almost sufficient evidence as to the stock, and even, in some cases, the part of the stock, whence it came. In addition to this body of strictly characteristic designs, there are some, generally only a few, however, which the stock in question shares with some other stock or stocks, usually those with which it is in contact. That in such cases the fact of the common possession of designs is to be explained as due to borrowing or copying of the designs of one stock by basket-makers of the other, is most probable, and any other explanation seems unnecessary. In the case of tribes which may show other evidences of close relationship, such instances may be due to inheritance from a common ancestor; but, until good evidence of this close relationship is forthcoming, such community of design can easiest be explained by borrowing. That the Indians themselves recognize the existence of such borrowing is shown by cases similar to the design on Plate XIV, Fig. 1, where it was expressly stated that the design had been taken from a type of basket common to the south. In this case, no attempt seems to have been made to explain the design, or invent a meaning for it.

As a rule, borrowed designs do not spread far, and are often confined to that part of the borrowing stock which lies directly along the line of contact. There are a few designs, however, which are of wider distribution, common not only to adjacent stocks or portions of stocks, but occurring here and there from Southern California to Washington and British Columbia. A design of this sort would be the arrow-point, for instance. Must we, in such cases, regard the wide distribution of the design as due to dissemination or to borrowing? As a rule, designs thus widely spread are extremely simple, and, owing to this, receive different explanations in different places, although sometimes, as in the case of the arrow-point, the same explanation is given at points widely separated. In view of the very simple nature, as a rule, of these widely spread designs, it would seem more probable that they have been invented locally and independently, and that in such cases we have no need to call in the hypothesis of contact or dissemination. That widely separated members of the same race should independently develop similar designs, even under different environment, is, *a priori*, more probable than that members of two totally distinct races living on different continents should do so. Yet a most remarkable example of this has been noted recently. Several of the negro tribes of East Africa, living to the south of Lake Victoria Nyanza, are most expert makers of coiled basketry. A considerable collection of these baskets is to be found in the rich collections of the Königliche Museum für Völkerkunde in Berlin; and, having been struck by the remarkable similarity of the designs to those of the Maidu, permission was very kindly given to have several of the baskets photographed for the purpose of comparison here. On Plate XXXVII, seven of these East African baskets are shown; and the designs, the meaning of which is unfortunately unknown, may be compared with several Maidu designs already described. With the feather (Plate X, Fig. 3; Plate XI, Fig. 3), Fig. 1 may be compared. The similarity of Figs. 2, 3, to the vine (Plate VIII, Fig. 2, etc.), is so close as to be very striking; while the practical identity of Fig. 4 with the water-snake on Plate IV, Figs. 4, 5, is even more startling. The earthworm or deer-excrement design finds its counterpart in Fig. 7; whereas Figs. 5, 6, especially the latter, show close similarity to the Maidu flower as shown on Plate VIII, Fig. 4. The great similarity, not to say identity, of these designs, is most striking, and, as in this case we have no possible suggestion of borrowing or contact, we are forced to regard the instance as a remarkable example of the independent origin of similar designs by peoples not only antipodal in their location, but of entirely distinct races. Since, therefore, even in such extreme cases, simple designs may be independently devised, it is quite possible that such widely distributed designs as the arrow-point may here be explained in the same way, and we may not need to look to dissemination or borrowing to explain them.

While the facts here presented have some value and interest in and for themselves, they have also a significance in the light which they may throw on the general theories of art and the development of design in general. That the geometric designs in use, for purposes of decoration and ornament, by savage tribes in all parts of the world, have a significance and a well-recognized meaning, has within the last few years been abundantly proved. The fact that such rigid and geometrical figures were thus in reality significant, and were representations of animals, plants, and other objects and phenomena, led at once to discussions as to whether the designs in question were in their origin realistic or decorative; whether, to quote from a recent admirable presentation of the whole question,[1] "original pictures were conventionalized into decorative symbolism," or whether "original ornament was expanded into symbolic decoration." In the paper here referred to, Kroeber concludes, starting from a study of Arapaho design, that we are not justified in regarding these designs as the outcome of either of these tendencies alone, but rather as a fusion of both. It is contended, that, in the mind of primitive man, realism and decoration are not differentiated, and that it is only with increased cultural development that a gradual differentiation of these two tendencies is brought about, until, in the end, they may become almost if not quite distinct. In the case of savages, moreover, the pictographic element may also come in, and this, with other tendencies, serves to complicate a situation already by no means simple. All of this, then, leads us to the conclusion that any such phenomenon as art is not to be ascribed in its origin to any single cause, but rather to the interaction of a multiplicity of causes; the relative importance of each as a factor varying in different cases and with different peoples.

We should, then, expect to find instances in which the balance between the two opposing tendencies of "realistic symbolism" and "decorative conventionalism" would not be as perfect as in the case of the Arapaho, and examples where the tendency either toward realism or decoration would preponderate. While, in most cases, the basketry designs from Washington and British Columbia, described by Farrand,[2] are distinctly geometric, and conventionalized to such an extent that one must needs be told their significance before he can form any idea as to the object intended to be represented, yet one or two designs occur within this area, in which the figures of men, of horses, dogs, etc., are represented with sufficient realism to be recognized almost at a glance. Others, on the other hand, as for example the flying birds (particularly the form shown in Fig. 318),[1] are conventionalized so slightly, that one notices the accuracy of representation when once the meaning and intent of the design is explained. In such case it would seem that the realistic tendency is greater than in Arapaho art; the purely decorative factor being less conspicuous, although by no means absent.

---

[1] A. L. Kroeber, Decorative Symbolism of the Arapaho (American Anthropologist, N.S., Vol. III, pp. 308–337).

[2] L. Farrand, Basketry Designs of the Salish Indians (Memoirs American Museum of Natural History, Vol. II, pp. 391–399).

The designs here shown, I am tempted to regard as occupying a place about midway between the balance of Arapaho art and the somewhat preponderant realism of the Salish designs. We do not find here any such realistic figures as those of the men, dogs, and horses found farther north; but I believe we may class a few of the California designs with the flying-bird type, where, once the intent is known, the accuracy of representation (always bearing in mind the limitations of material) is quite striking. Thus, in the case of the Maidu, the quail-tip, fish-teeth, milleped, flower, and feather have been so little conventionalized, that, although each and all are repeated and joined to form a pattern clearly decorative in character, once the significance of the design is given, one cannot but observe the all but realistic manner in which the object is portrayed. Many of the other designs are to some extent of a similar character; while others, of course, are so thoroughly conventionalized that any resemblance they may once have had to the object they are declared to represent has completely disappeared.

This tendency to what might be called a "hidden" or "obscure realism" seems more characteristic of the Maidu than of the other stocks here discussed, all of which, it would seem, show a greater conventionalization. It is possible that the fact of the Maidu having so astonishingly large a number of designs, and so large a proportion of animal and plant motives, may have some bearing on the question. That so large a number of designs, referred in such overwhelming proportion to animals or plants, should not owe their origin and development more to the realistic than to the purely decorative tendency, seems unlikely; and while we have not here, as in the case of the Salish flying birds, any variants which are distinctly more realistic, it would seem not unreasonable to expect that they had existed. Here, however, we enter on the domain of pure speculation, which in such matters is exceedingly unsafe. On the whole, then, taking all the circumstances into consideration, the designs here discussed may be regarded as occupying a plane about midway between the designs of the Salish and the Arapaho.

---

[1] Basketry Designs of the Salish Indians, p. 304, Figs. 317, 318.

It would be of considerable interest in this connection to know the meaning of the designs on the African baskets previously spoken of. In the absence of any information, we cannot say a design identical with the Maidu form is in this case the result of a similar relative importance of the two chief factors in primitive art. From the extremely simple character of these and all other designs on baskets from these African tribes, it seems possible that we have here, not a slight preponderance of realism, as in the Maidu and still more in the Salish, but rather an equilibrium, or even a preponderance on the other side; realism being subordinated somewhat to the purely decorative tendency.

From the material here presented, then, as a whole, we may conclude, that, in so far as it has a bearing on the theories of the origin and development of art in general, it tends to confirm the belief, that in the mind of primitive man no design is either purely realistic or decorative, that all designs are to be ascribed in their origin to the interaction of both factors; now one, now the other, being in ascendancy. The great number and variety of designs in use by the stocks as a whole would seem to be the effect, partly, of a concentration of artistic effort upon a single type of art. On the other hand, the paucity of designs among the Pomo shows, again, the effect of such concentration; feather ornamentation here being exalted to first place, thus turning the attention away from the development of new designs. And lastly, just as we find, in the case of mythology, that myths may be borrowed and transmitted from tribe to tribe, so designs may be copied, and disseminated from one tribe to another, perhaps for considerable distances. Just as, in the case of myths, we can be sure of such dissemination only when we have to deal with a moderately complex tale whose component parts must recur in the same form and order, so can we be sure of dissemination of designs, only when we have a design which is not too simple. Should we find instances, as I believe we may, where in different regions the same moderately complex design occurs, then we should be justified in regarding the coincidence of design as due to transmission: on the other hand, where the design is of a simple character, there seems good reason to believe it possible that it has originated independently. Although, from the data at present available, we can only surmise development and migration of designs in a few cases, it seems probable, that, with increased material from all the tribes in the Pacific coast region, we may be able to show, that, in a number of instances, designs extending over a considerable area, or even quite widely separated, have in reality a common origin.

EXPLANATION OF PLATE I.

MAIDU BASKETS.

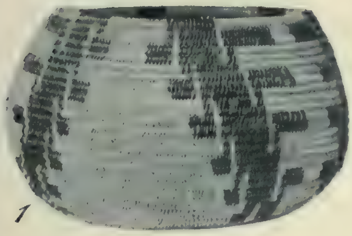
FIG. 1.—Basket with quail-tip design. Butte County. Height, 11 cm. Cat. No. $\frac{50}{169}$.

FIG. 2.—Basket with quail-tip design. Placer County. Height, 18 cm. Cat. No. $\frac{50}{1588}$.

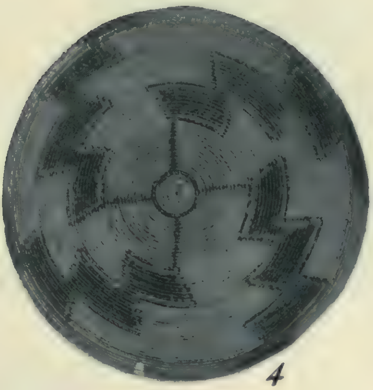
FIG. 3.—Basket with quail-tip design. Placer County. Height, 17 cm. Cat. No. $\frac{50}{1589}$.

FIG. 4.—Basket with duck's-wing design. Plumas County. Diameter, 43 cm. Cat. No. $\frac{50}{556}$.

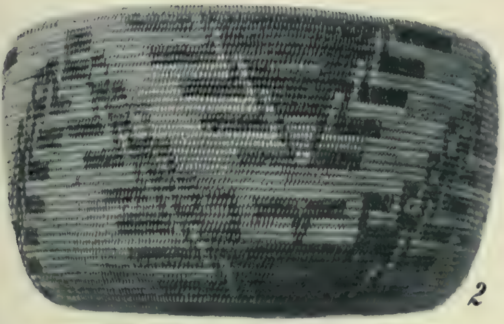
FIG. 5.—Basket with "eye" design. Plumas County. Diameter, 47.5 cm. Cat. No. $\frac{50}{546}$.



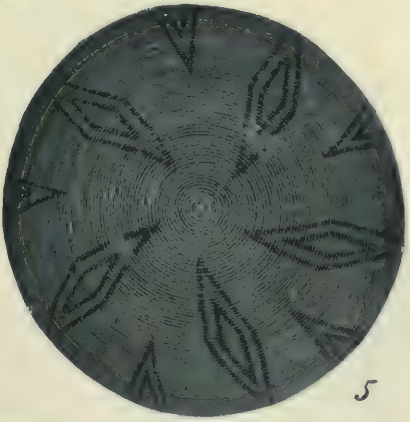
1



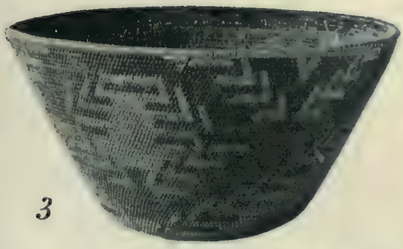
4



2



5



3

MAIDU BASKETS.

EXPLANATION OF PLATE II.

MAIDU BASKETS.

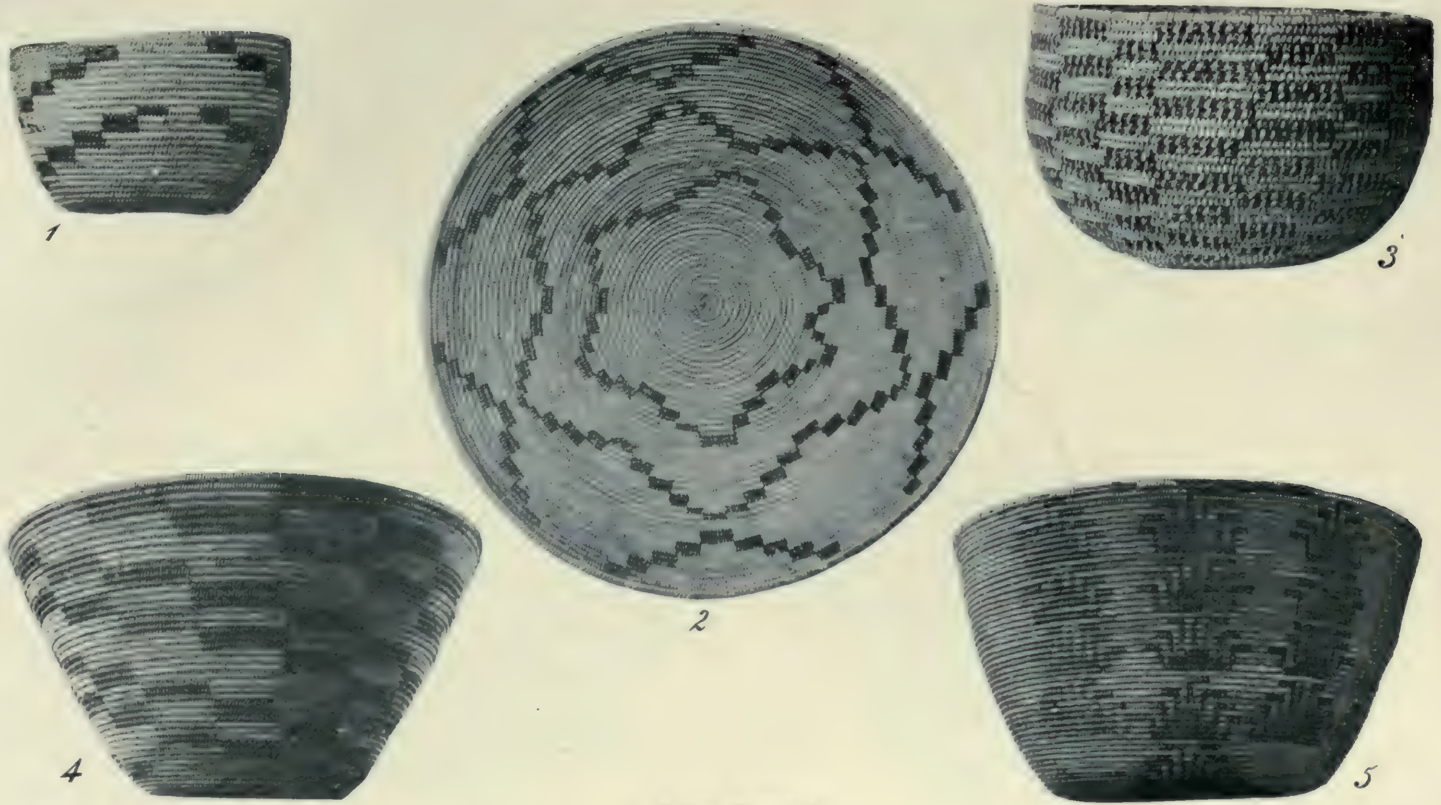
FIG. 1.—Basket with earthworm design. El Dorado County. Height, 6.5 cm. Cat. No. $\frac{50}{1874}$.

FIG. 2.—Basket with earthworm design. Butte County. Diameter, 41.5 cm. Cat. No. $\frac{50}{196}$.

FIG. 3.—Basket with earthworm design. El Dorado County. Height, 20 cm. Cat. No. $\frac{50}{1884}$.

FIG. 4.—Basket with "big-tongues" design. Butte County. Height, 22.5 cm. Cat. No. $\frac{50}{197}$.

FIG. 5.—Basket with gray-squirrel's-foot design. Butte County. Height, 20.5 cm. Cat. No. $\frac{50}{1815}$.



Maidu Baskets.

EXPLANATION OF PLATE III.

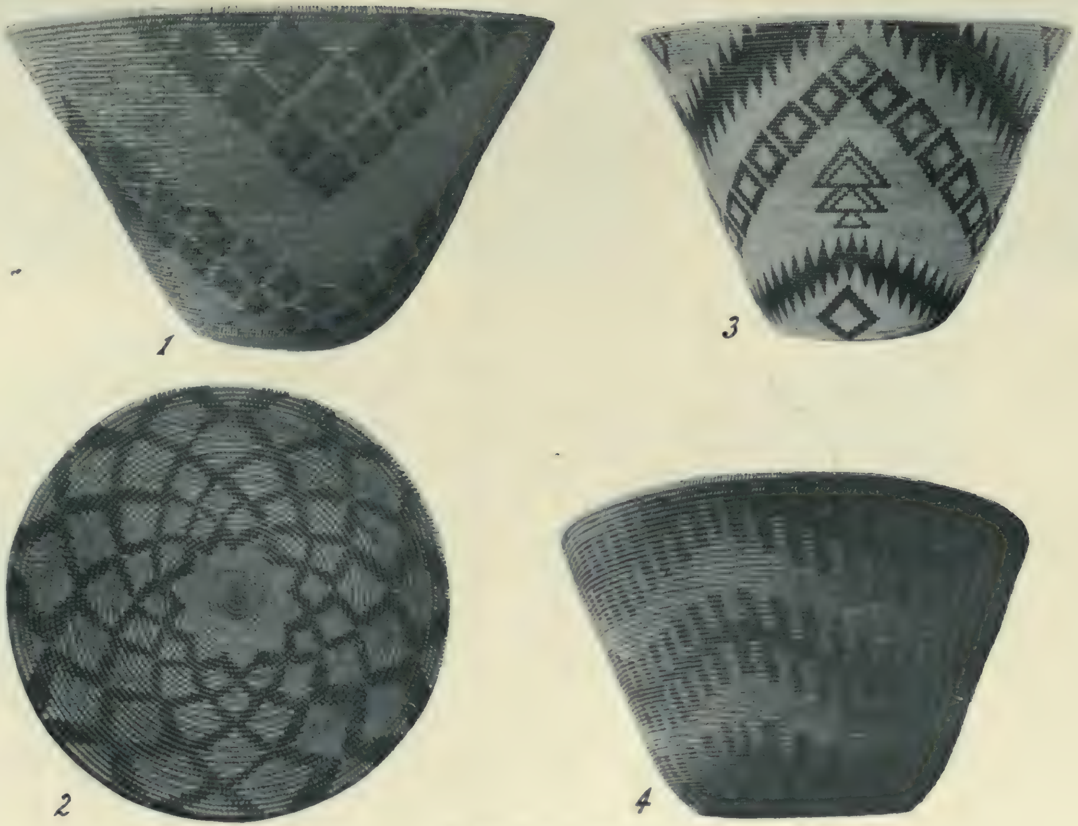
MAIDU BASKETS.

FIG. 1.—Basket with rattlesnake design. El Dorado County. Height, 27.5 cm. Cat. No. $\frac{50}{1867}$.

FIG. 2.—Basket with water-snake design. El Dorado County. Diameter, 36.5 cm. Cat. No. $\frac{50}{1889}$.

FIG. 3.—Basket with rattlesnake design. Placer County. Height, 36.5 cm. Cat. No. $\frac{50}{1716}$.

FIG. 4.—Basket with fish-teeth design. Butte County. Height, 26 cm. Cat. No. $\frac{50}{158}$.



MAIDU BASKETS.

EXPLANATION OF PLATE IV.

MAIDU BASKETS.

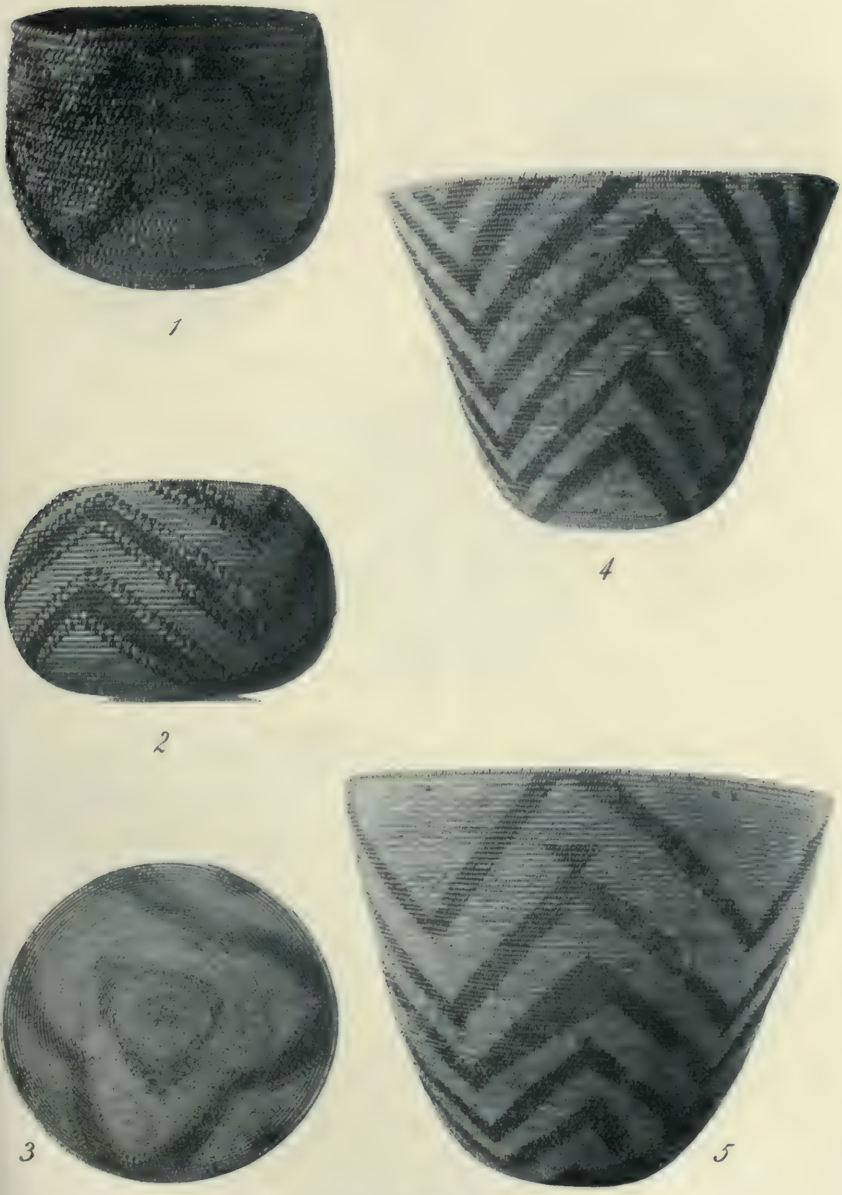
FIG. 1.—Basket with milleped design. El Dorado County. Height, 15 cm. Cat. No. $\frac{50}{1872}$.

FIG. 2.—Basket with milleped design. Butte County. Height, 10.5 cm. Cat. No. $\frac{50}{886}$.

FIG. 3.—Basket with fly design. Placer County. Diameter, 35.5 cm. Cat. No. $\frac{50}{1892}$.

FIG. 4.—Basket with water-snake design. El Dorado County. Height 33.5 cm. Cat. No. $\frac{50}{1890}$.

FIG. 5.—Basket with water-snake design. El Dorado County. Height, 50.5 cm. Cat. No. $\frac{50}{1717}$.



MAIDU BASKETS.

EXPLANATION OF PLATE V.

MAIDU BASKETS.

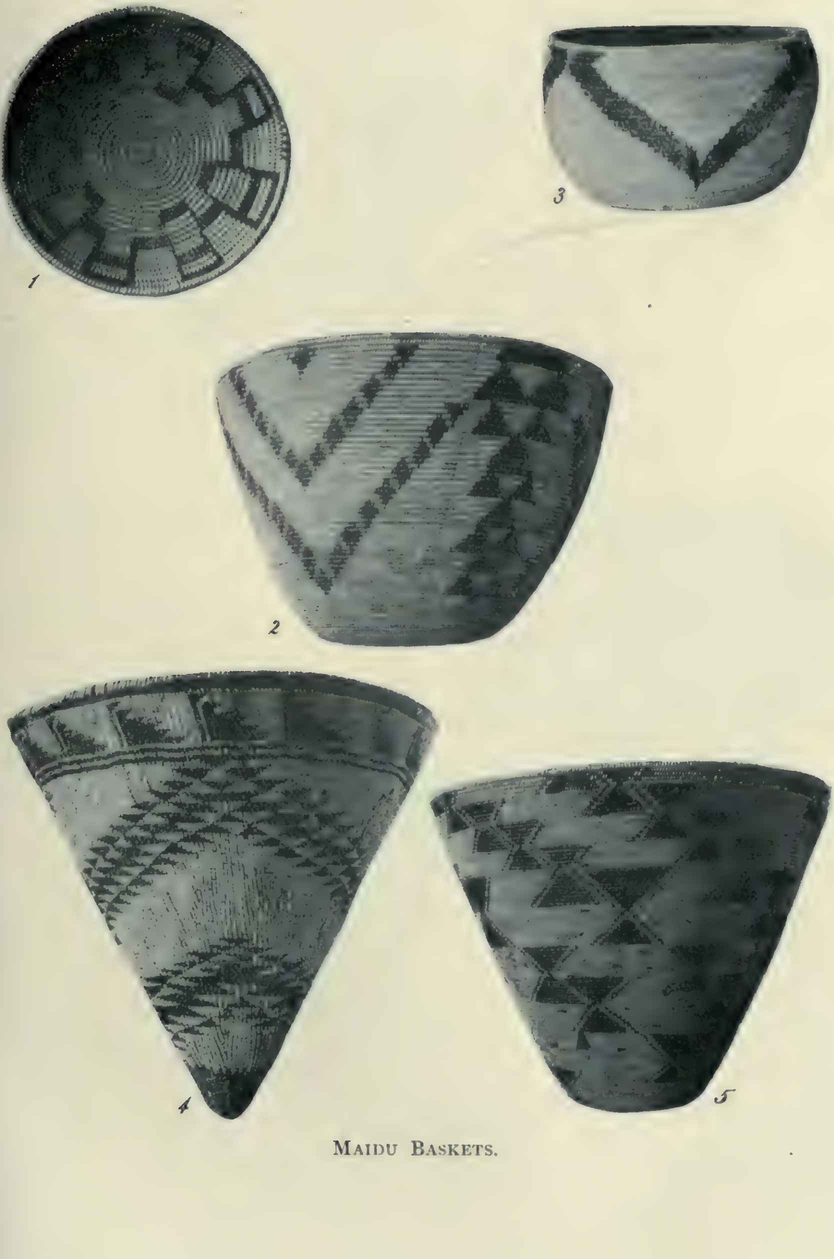
FIG. 1.—Basket with butterfly design. Butte County. Diameter, 15 cm. Cat. No. $\frac{50}{1602}$.

FIG. 2.—Basket with butterfly design. Butte County. Height, 26.5 cm. Cat. No. $\frac{50}{558}$.

FIG. 3.—Basket with raccoon design. Butte County. Height, 10.5 cm. Cat. No. $\frac{50}{567}$.

FIG. 4.—Basket with design of flying geese below; on the rim, mountains. Plumas County. Height, 47 cm. Cat. No. $\frac{50}{557}$.

FIG. 5.—Basket with moth-miller design. Placer County. Height, 48.5 cm. Cat. No. $\frac{50}{1891}$.



MAIDU BASKETS.

EXPLANATION OF PLATE VI.

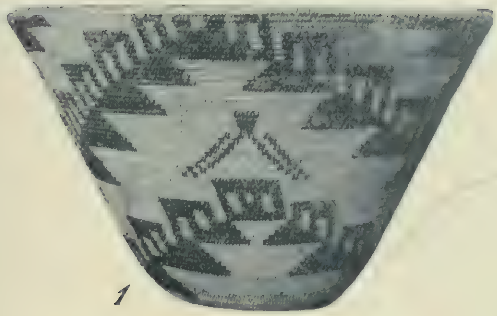
MAIDU BASKETS.

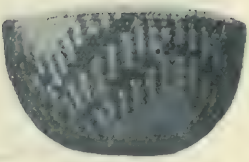
FIG. 1.—Basket with grasshopper-leg design. Nevada County. Height, 26.5 cm. Cat. No. $\frac{50}{1714}$.

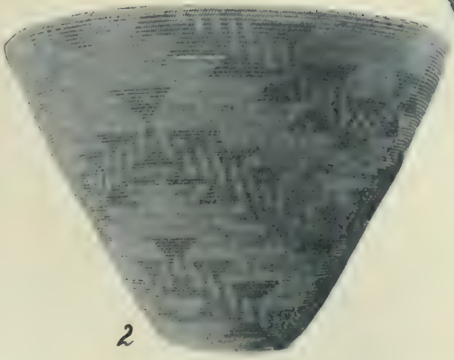
FIG. 2.—Basket with grasshopper-leg design. El Dorado County. Height, 41 cm. Cat. No. $\frac{50}{1866}$.

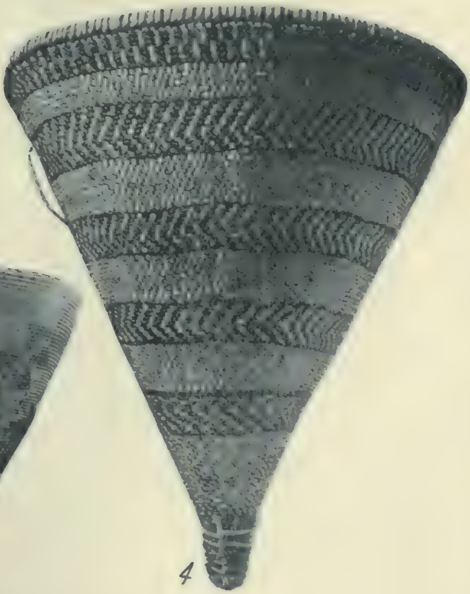
FIG. 3.—Basket with grasshopper-leg design. Plumas County. Height, 7.5 cm. Cat. No. $\frac{50}{840}$.

FIG. 4.—Basket with grasshopper-leg design. Butte County. Height, 60 cm. Cat. No. $\frac{50}{1808}$.


1


3


2


4

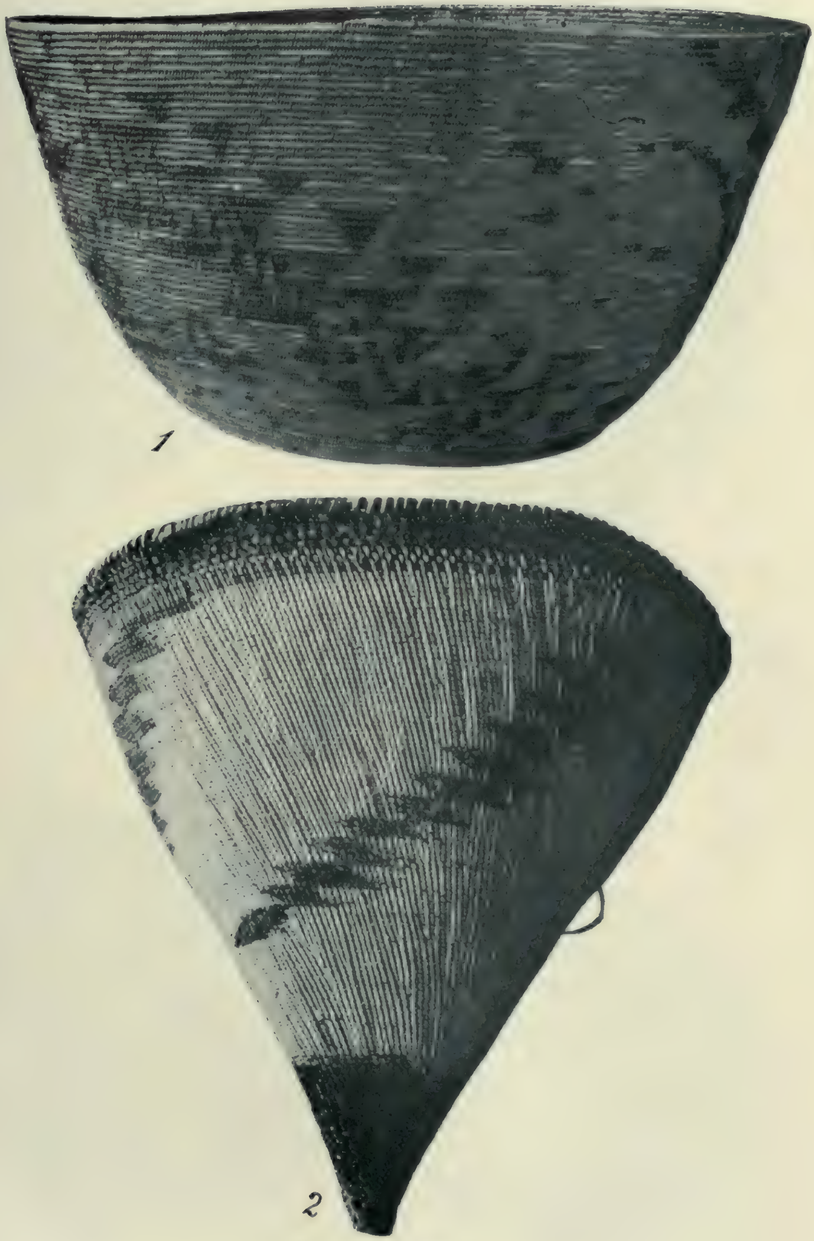
MAIDU BASKETS.

EXPLANATION OF PLATE VII.

MAIDU BASKETS.

FIG. 1.—Basket with plant design. Butte County. Height, 32.5 cm. Cat. No. $\frac{50}{178}$.

FIG. 2.—Basket with vine design. Plumas County. Height, 54 cm. Cat. No. $\frac{50}{580}$.



MAIDU BASKETS.

EXPLANATION OF PLATE VIII.

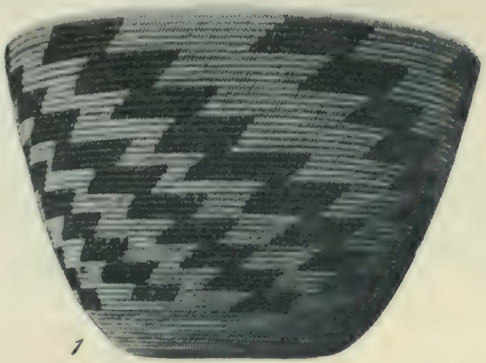
MAIDU BASKETS.

Fig. 1.—Basket with vine design. Butte County. Height, 23 cm. Cat. No. $\frac{50}{569}$.

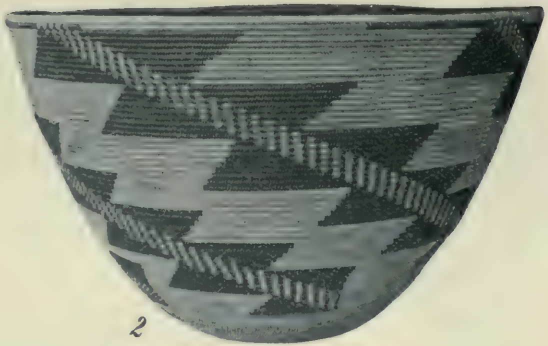
Fig. 2.—Basket with brake design. Butte County. Height, 25.75 cm. Cat. No. $\frac{50}{288}$.

Fig. 3.—Basket with design of a sugar-pine (probably). Butte County. Diameter, 31 cm. Cat. No. $\frac{50}{1604}$.

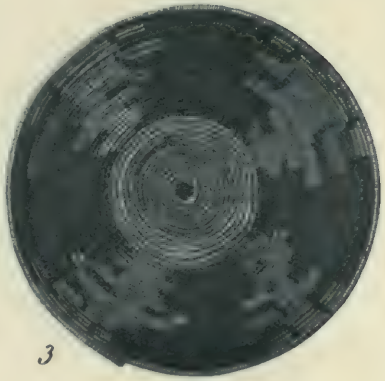
Fig. 4.—Basket with flower design. Butte County. Height, 22.5 cm. Cat. No. $\frac{50}{181}$.



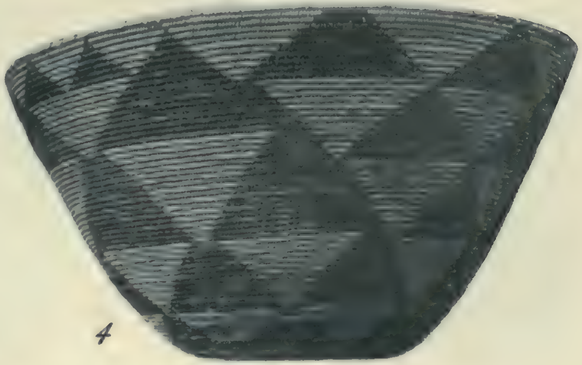
1



2



3



4

MAIDU BASKETS.

EXPLANATION OF PLATE IX.

MAIDU BASKETS.

FIG. 1.—Basket with yellow-pine design. El Dorado County. Height, 10.5 cm. Cat. No. $\frac{50}{1886}$.

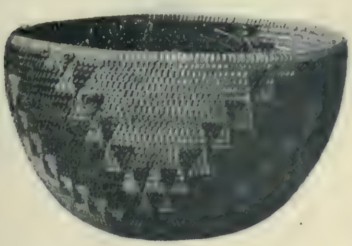
FIG. 2.—Basket with design below of pine-cones; on the rim, of mountains. Plumas County. Height, 48 cm. Cat. No. $\frac{50}{542}$.

FIG. 3.—Basket with black-oak design. El Dorado County. Height, 18 cm. Cat. No. $\frac{50}{1883}$.

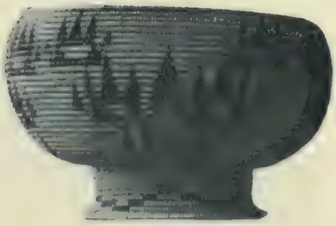
FIG. 4.—Basket with white-oak design. El Dorado County. Height, 20.25 cm. Cat. No. $\frac{50}{1892}$.

FIG. 5.—Basket with design of bushes. Plumas County. Height, 13.5 cm. Cat. No. $\frac{50}{519}$.

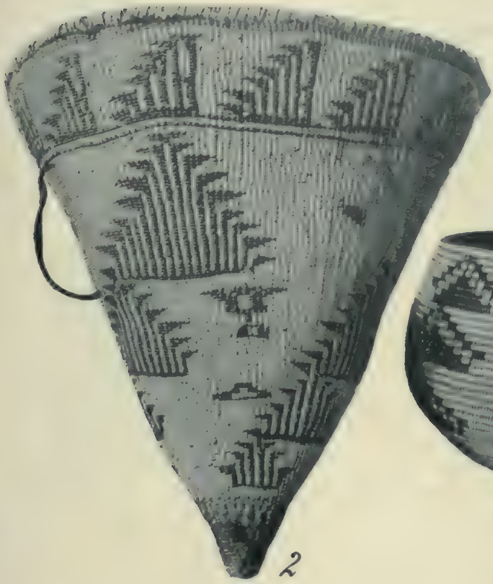
FIG. 6.—Basket with design of bushes or flowers. Plumas County. Height, 12 cm. Cat. No. $\frac{50}{552}$.



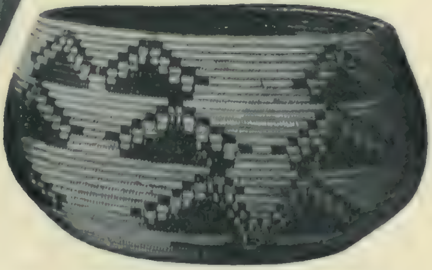
1



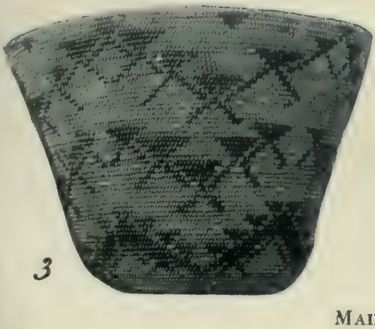
6



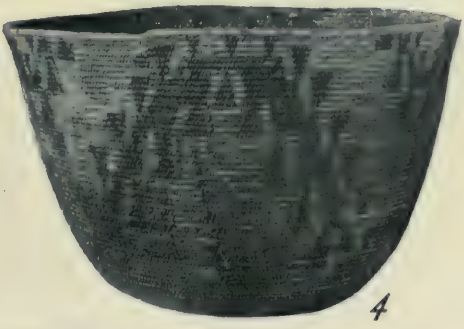
2



5



3



4

Maidu Baskets.

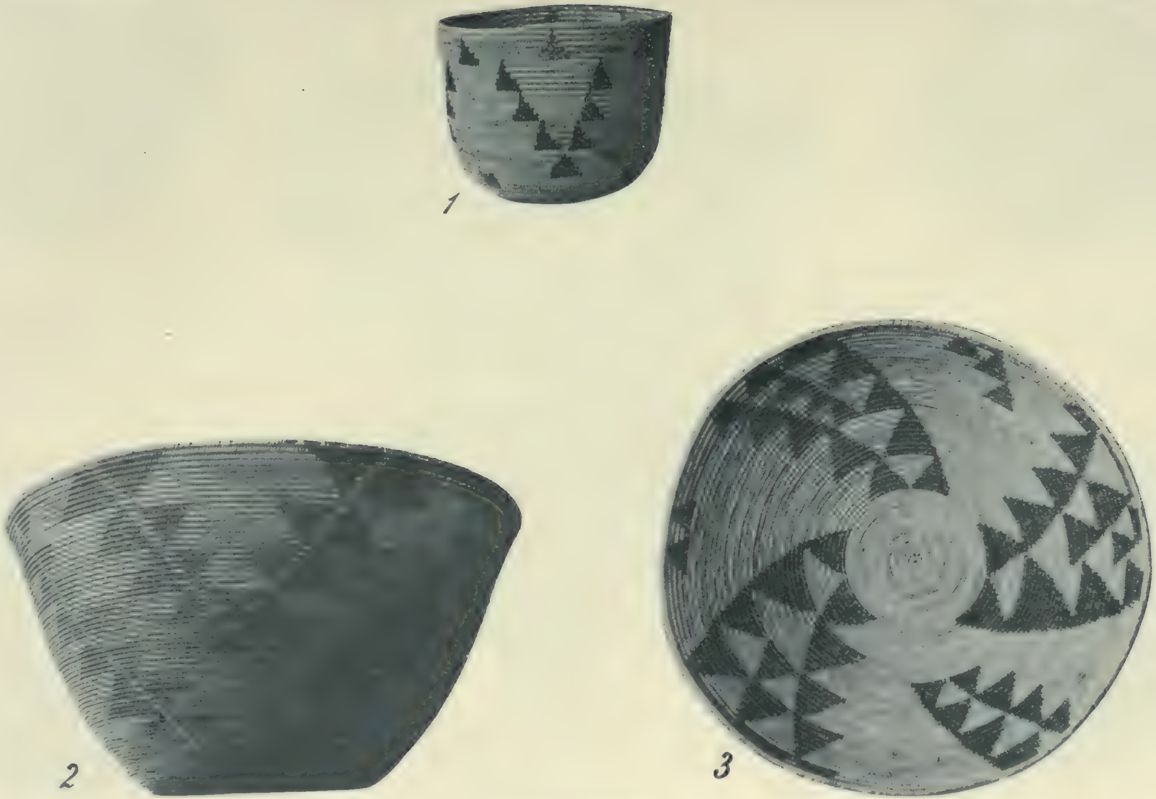
EXPLANATION OF PLATE X.

MAIDU BASKETS.

FIG. 1.—Basket with arrow-feather design. El Dorado County. Height, 8.25 cm. Cat. No. $\frac{50}{1878}$.

FIG. 2.—Basket with arrow-feather design. Butte County. Height, 23 cm. Cat. No. $\frac{50}{186}$.

FIG. 3.—Basket with arrow-feather design. Butte County. Diameter, 44.5 cm. Cat. No. $\frac{50}{199}$.



MAIDU BASKETS.

EXPLANATION OF PLATE XI.

MAIDU BASKETS.

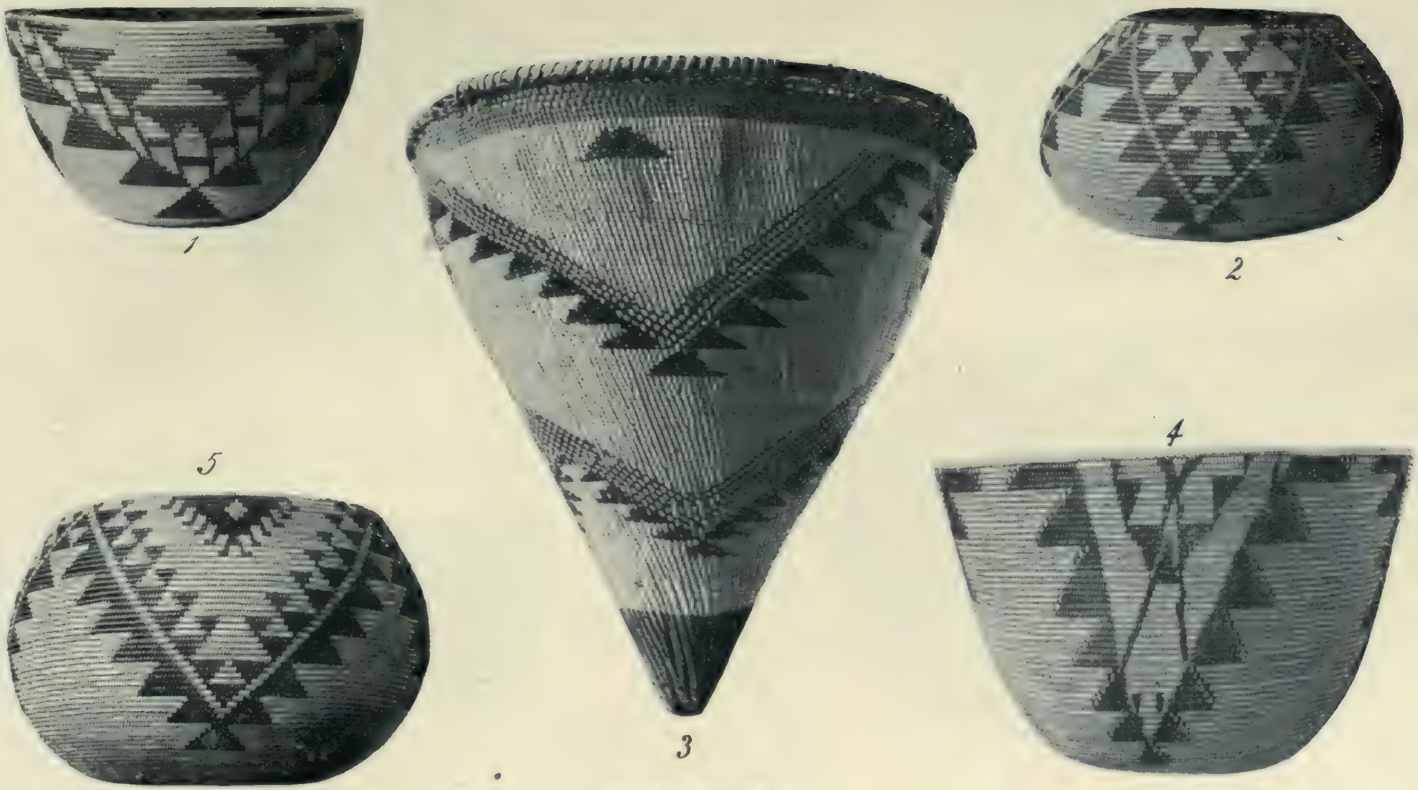
FIG. 1.—Basket with arrow-feather design. Butte County. Height, 12 cm. Cat. No. $\frac{50}{287}$.

FIG. 2.—Basket with arrow-feather and quail-tip design. Plumas County. Height, 12.5 cm. Cat. No. $\frac{50}{587}$.

FIG. 3.—Basket with arrow-feather design. Plumas County. Height, 44 cm. Cat. No. $\frac{50}{586}$.

FIG. 4.—Basket with arrow-feather design. Plumas County. Height, 24 cm. Cat. No. $\frac{50}{528}$.

FIG. 5.—Basket with arrow-feather and quail-tip design. Plumas County. Height, 16 cm. Cat. No. $\frac{50}{1810}$.



MAIDU BASKETS.

EXPLANATION OF PLATE XII.

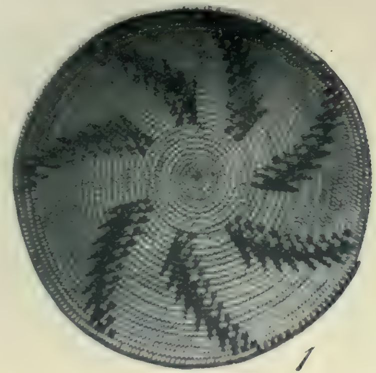
MAIDU BASKETS.

FIG. 1.—Basket with arrow-point design. Placer County. Diameter, 15 cm. Cat. No. $\frac{50}{1591}$.

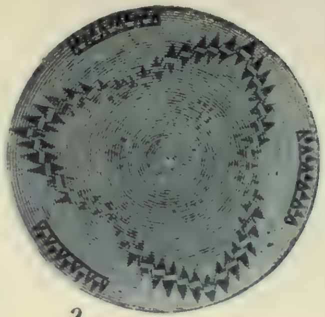
FIG. 2.—Basket with arrow-point design. Plumas County. Diameter, 36 cm. Cat. No. $\frac{50}{547}$.

FIG. 3.—Basket with arrow-point design. El Dorado County. Height, 9 cm. Cat. No. $\frac{50}{1883}$.

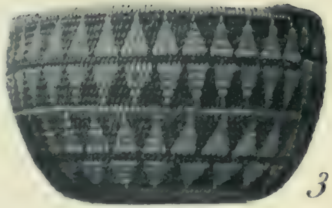
FIG. 4.—Basket with arrow-point design. Butte County. Diameter, 46.5 cm. Cat. No. $\frac{50}{1603}$.



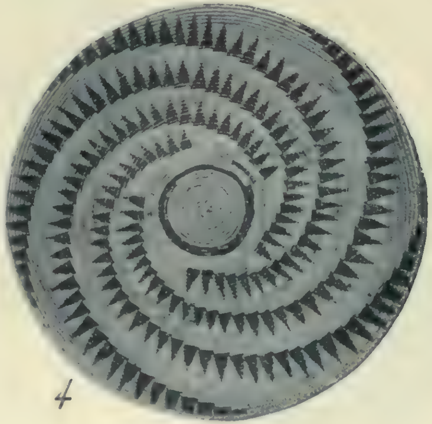
1



2



3



4

Maidu Baskets.

EXPLANATION OF PLATE XIII.

MAIDU BASKETS.

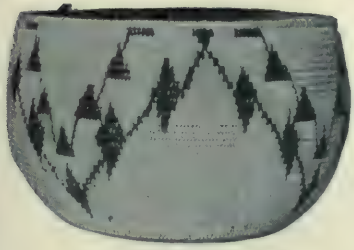
FIG. 1.—Basket with arrow-point design. Plumas County. Height, 11.5 cm. Cat. No. $\frac{50}{881}$.

FIG. 2.—Basket with arrow-point design. El Dorado County. Diameter, 31 cm. Cat. No. $\frac{50}{1882}$.

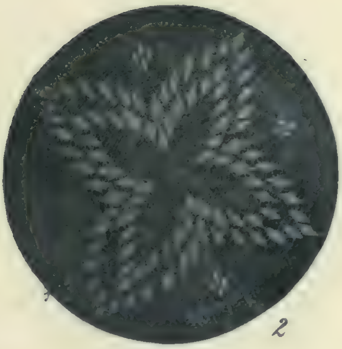
FIG. 3.—Basket with arrow-point design. Butte County. Diameter, 45.5 cm. Cat. No. $\frac{50}{1868}$.

FIG. 4.—Basket with arrow-point design. El Dorado County. Height, 11 cm. Cat. No. $\frac{50}{1878}$.

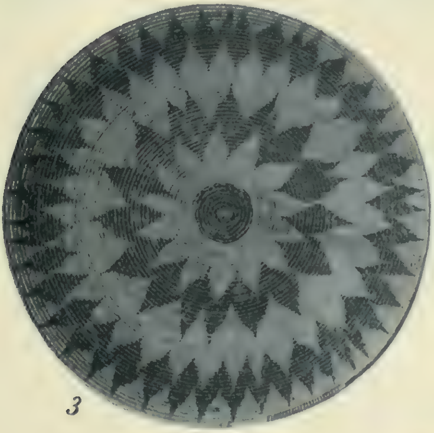
FIG. 5.—Basket with arrow-point design. Plumas County. Diameter, 44.5 cm. Cat. No. $\frac{50}{848}$.



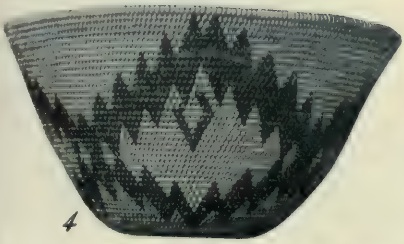
1



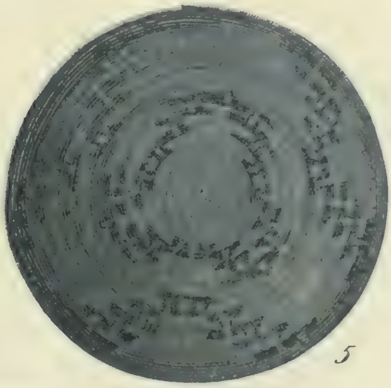
2



3



4



5

MAIDU BASKETS.

EXPLANATION OF PLATE XIV.

MAIDU BASKETS.

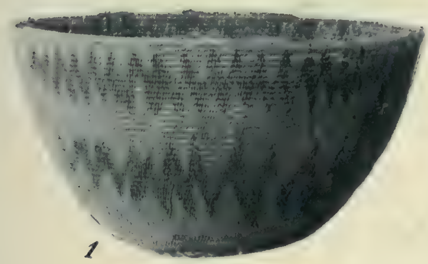
FIG. 1.—Basket with design, on the rim, of arrow-point; below, a pattern of unknown significance. Plumas County. Height, 19 cm. Cat. No. $\frac{50}{541}$.

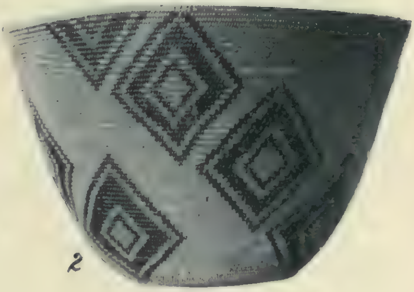
FIG. 2.—Basket with diamond design. Butte County. Height, 21.5 cm. Cat. No. $\frac{50}{1607}$.

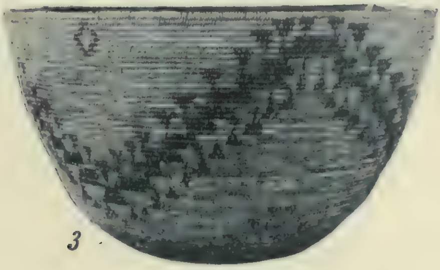
FIG. 3.—Basket with design of animal tracks. Butte County. Height, 22.5 cm. Cat. No. $\frac{50}{176}$.

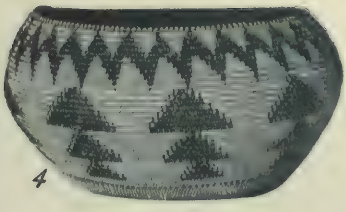
FIG. 4.—Basket with mountain-and-cloud design. Plumas County. Height, 11.5 cm. Cat. No. $\frac{50}{550}$.

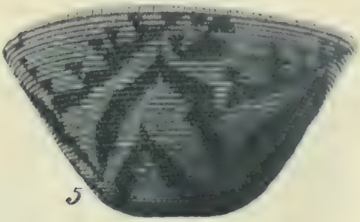
FIG. 5.—Basket with design of "something turning round" and arrow-points. Butte County. Height, 16 cm. Cat. No. $\frac{50}{1611}$.


1


2


3


4


5

MAIDU BASKETS.

EXPLANATION OF PLATE XV.

MAIDU BASKETS.

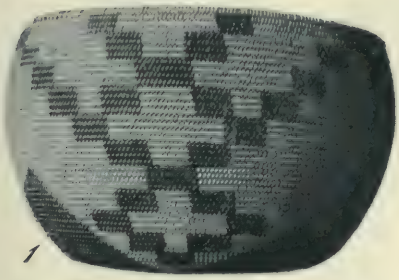
FIG. 1.—Basket with design of wood in billets. Placer County. Height, 13.5 cm. Cat. No. $\frac{50}{1887}$.

FIG. 2.—Basket with design of wood in billets. El Dorado County. Height, 20 cm. Cat. No. $\frac{50}{1888}$.

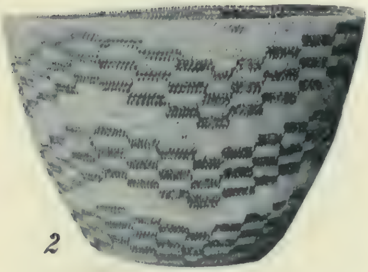
FIG. 3.—Basket with design of a pair of tongs. Butte County. Height, 27 cm. Cat. No. $\frac{50}{1771}$.

FIG. 4.—Basket with bead design. El Dorado County. Height, 13.5 cm. Cat. No. $\frac{50}{1882}$.

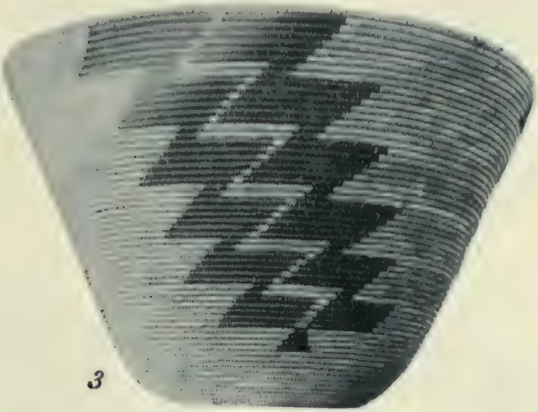
FIG. 5.—Basket with bead design. El Dorado County. Height, 11.5 cm. Cat. No. $\frac{50}{1877}$.



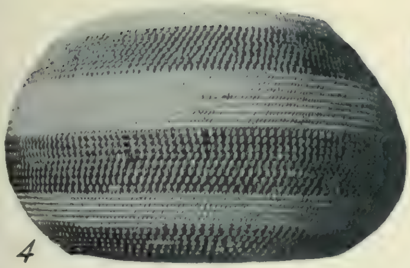
1



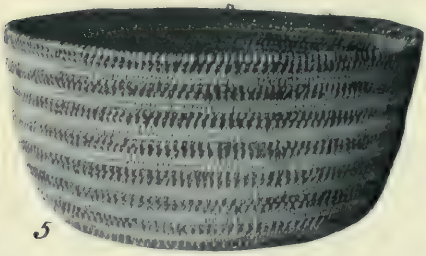
2



3



4



5

MAIDU BASKETS

EXPLANATION OF PLATE XVI.

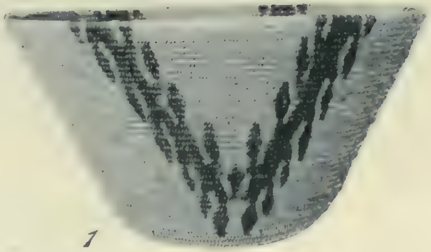
MÁIDU BASKETS.

FIG. 1.—Basket with design representing either a hornet or a tree. El Dorado County. Height, 19 cm. Cat. No. $\frac{50}{1718}$.

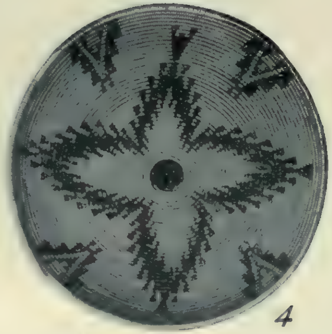
FIG. 2.—Basket with design of unknown significance. Nevada County. Height, 29.5 cm. Cat. No. $\frac{50}{1715}$.

FIG. 3.—Basket with design of unknown significance. Butte County. Height, 17 cm. Cat. No. $\frac{50}{170}$.

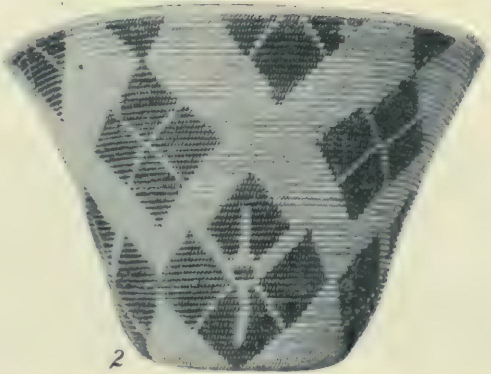
FIG. 4.—Basket with feather and arrow-point design (probably). Plumas County. Diameter, 33.5 cm. Cat. No. $\frac{50}{845}$.



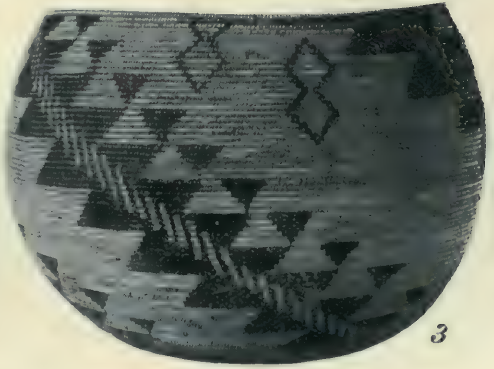
1



4



2



3

MAIDU BASKETS.

EXPLANATION OF PLATE XVII.

MAIDU BASKETS.

FIG. 1.—Basket with water-snake (?) design. El Dorado County. Height, 11 cm. Cat. No. $\frac{50}{1376}$.

FIG. 2.—Basket with water-snake (?) design. El Dorado County. Height, 10 cm. Cat. No. $\frac{50}{1375}$.

FIG. 3.—Basket with feather (?) design. El Dorado County. Height, 11.5 cm. Cat. No. $\frac{50}{1370}$.

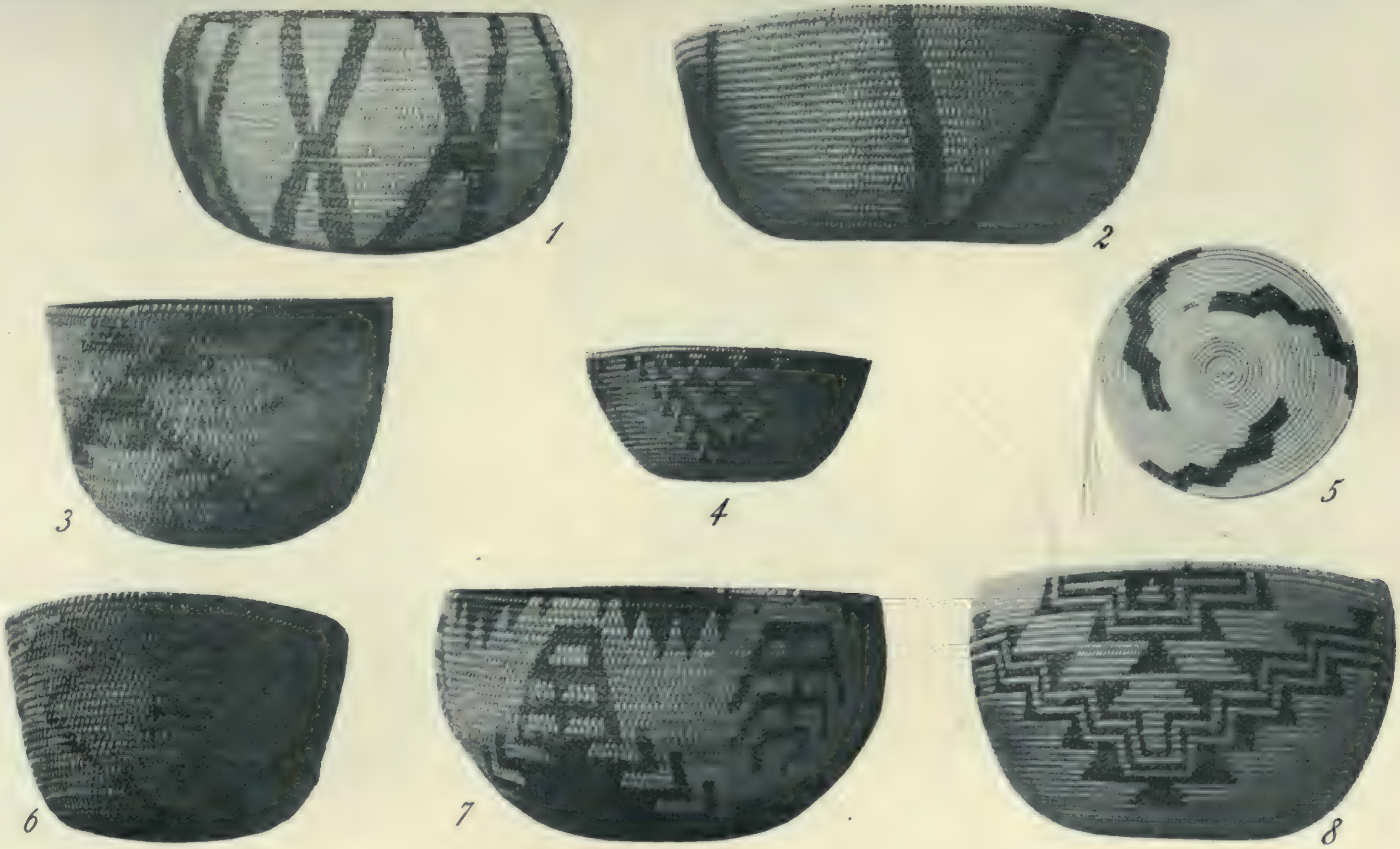
FIG. 4.—Basket with design of unknown significance. Placer County. Height, 4.25 cm. Cat. No. $\frac{50}{1590}$.

FIG. 5.—Basket with design of unknown significance. Plumas County. Diameter, 25 cm. Cat. No. $\frac{50}{548}$.

FIG. 6.—Basket with design of unknown significance. El Dorado County. Height, 10 cm. Cat. No. $\frac{50}{1371}$.

FIG. 7.—Basket with design of unknown significance. Butte County. Height, 10.5 cm. Cat. No. $\frac{50}{1586}$.

FIG. 8.—Basket with design of unknown significance. Plumas County. (Compare Plate XX, Figs. 3, 4, 6.) Height, 14.5 cm. Cat. No. $\frac{50}{1605}$.



MAIDU BASKETS.

EXPLANATION OF PLATE XVIII.

PIT RIVER BASKETS.

FIG. 1.—Basket with design of mussel's tongue. Height, 13 cm. Cat. No. $\frac{50}{1645}$.

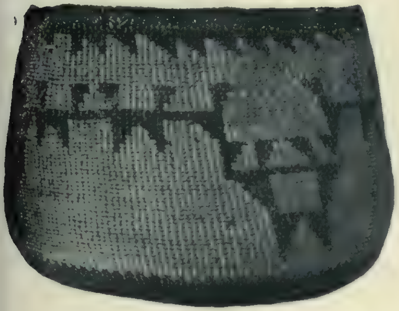
FIG. 2.—Basket with design of mussel's tongue. Height, 8.5 cm. Cat. No. $\frac{50}{1642}$.

FIG. 3.—Basket with design of mussel's tongue. Height, 22 cm. Cat. No. $\frac{50}{1639}$.

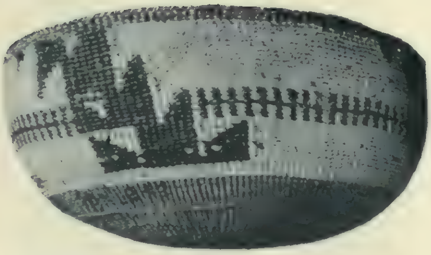
FIG. 4.—Basket with skunk design. Height, 10.5 cm. Cat. No. $\frac{50}{1686}$.

FIG. 5.—Basket with fish-tail design. Height, 21.5 cm. Cat. No. $\frac{50}{1684}$.

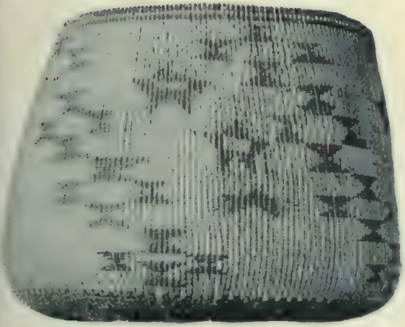
FIG. 6.—Basket with "bent-knee" design. Height, 16.5 cm. Cat. No. $\frac{50}{1640}$.



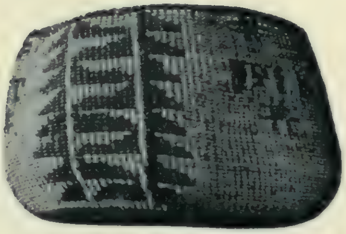
1



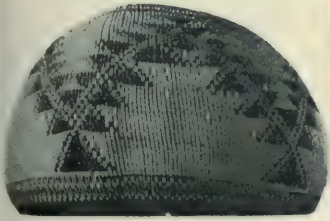
2



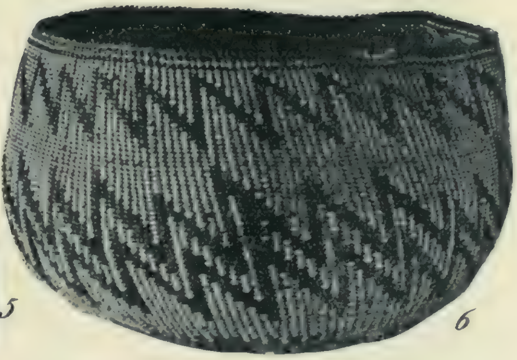
3



4



5



6

PIT RIVER BASKETS.

EXPLANATION OF PLATE XIX.

PIT RIVER BASKETS.

Fig. 1.—Basket with lizard or lizard-foot design. Height, 9 cm. Cat. No. $\frac{50}{1624}$.

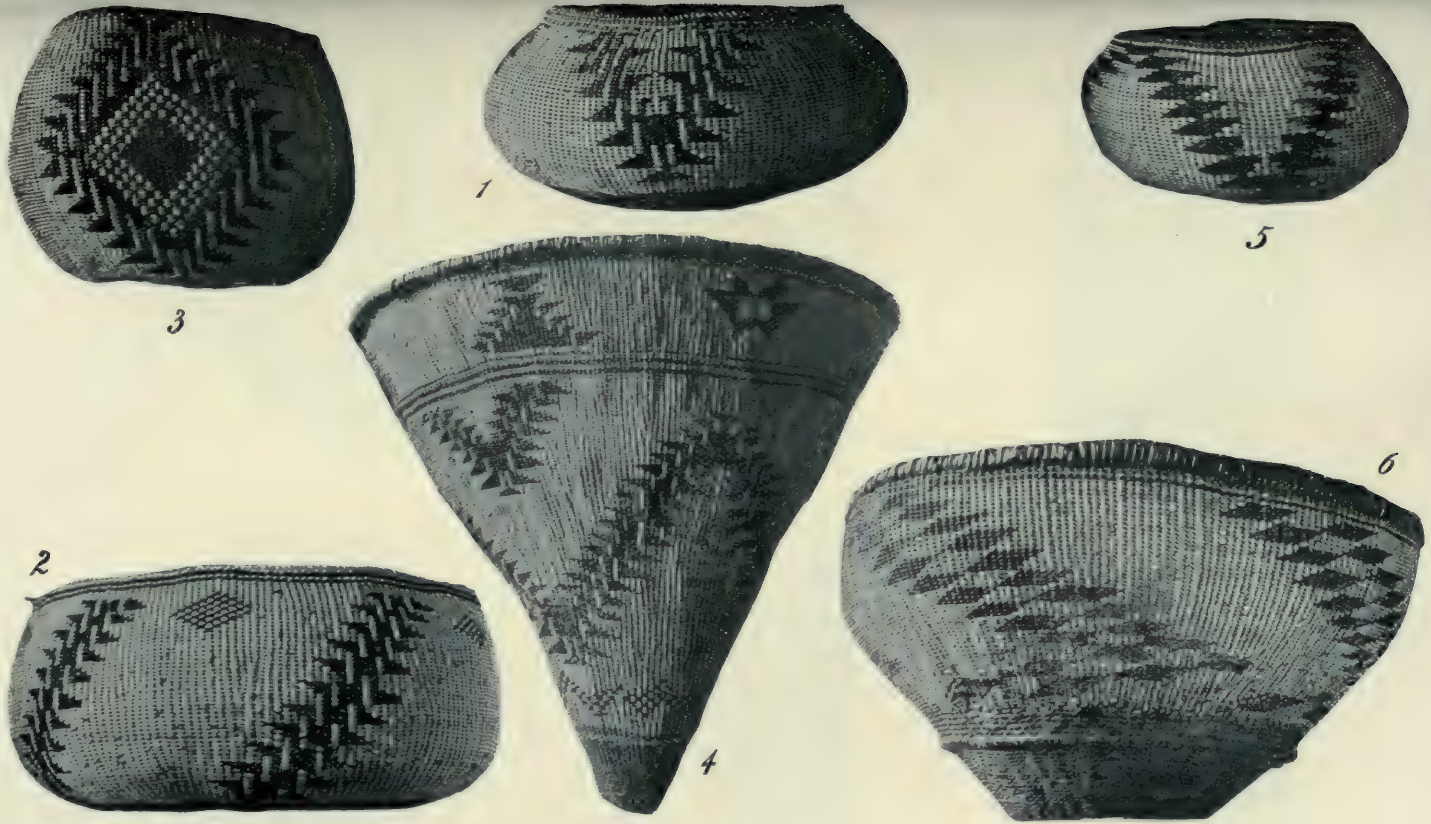
Fig. 2.—Basket with lizard or lizard-foot and diamond design. Height, 11.5 cm. Cat. No. $\frac{50}{1638}$.

Fig. 3.—Basket with "eye" and lizard-foot design. Height, 11.5 cm. Cat. No. $\frac{50}{1641}$.

Fig. 4.—Basket with design, on the bottom, of meadow-lark's neck; above, quail; on the rim, mountain or bear's foot and mussel's tongue. Height, 40 cm. Cat. No. $\frac{50}{1679}$.

Fig. 5.—Basket with flying-geese design. Height, 7.5 cm. Cat. No. $\frac{50}{1644}$.

Fig. 6.—Basket with flying-geese design. Height, 25 cm. Cat. No. $\frac{50}{1637}$.



Pit River Baskets.

EXPLANATION OF PLATE XX.

PIT RIVER BASKETS.

FIG. 1.—Basket with flying-geese (?) and pine-cone design. Height, 25 cm. Cat. No. $\frac{50}{1637}$.

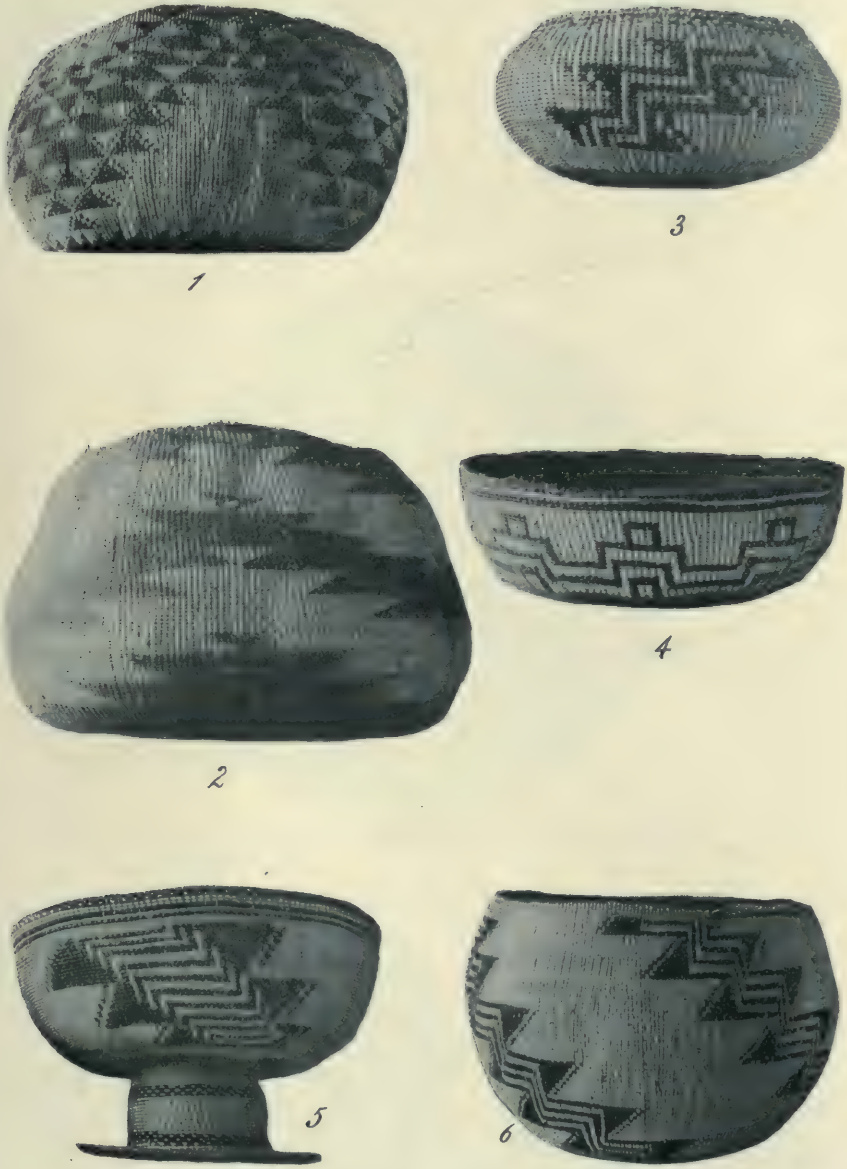
FIG. 2.—Basket with design of bushes. Height, 20.25 cm. Cat. No. $\frac{50}{1648}$.

FIG. 3.—Basket with design of deer-guts and arrow-points. Height, 7 cm. Cat. No. $\frac{50}{1625}$.

FIG. 4.—Basket with deer-gut design. Height, 9.5 cm. Cat. No. $\frac{50}{1652}$.

FIG. 5.—Basket with deer-rib and arrow-point design. Height, 12.5 cm. Cat. No. $\frac{50}{1628}$.

FIG. 6.—Basket with deer-gut and arrow-point design. Height, 28 cm. Cat. No. $\frac{50}{1621}$.



PIT RIVER BASKETS.

EXPLANATION OF PLATE XXI.

PIT RIVER BASKETS.

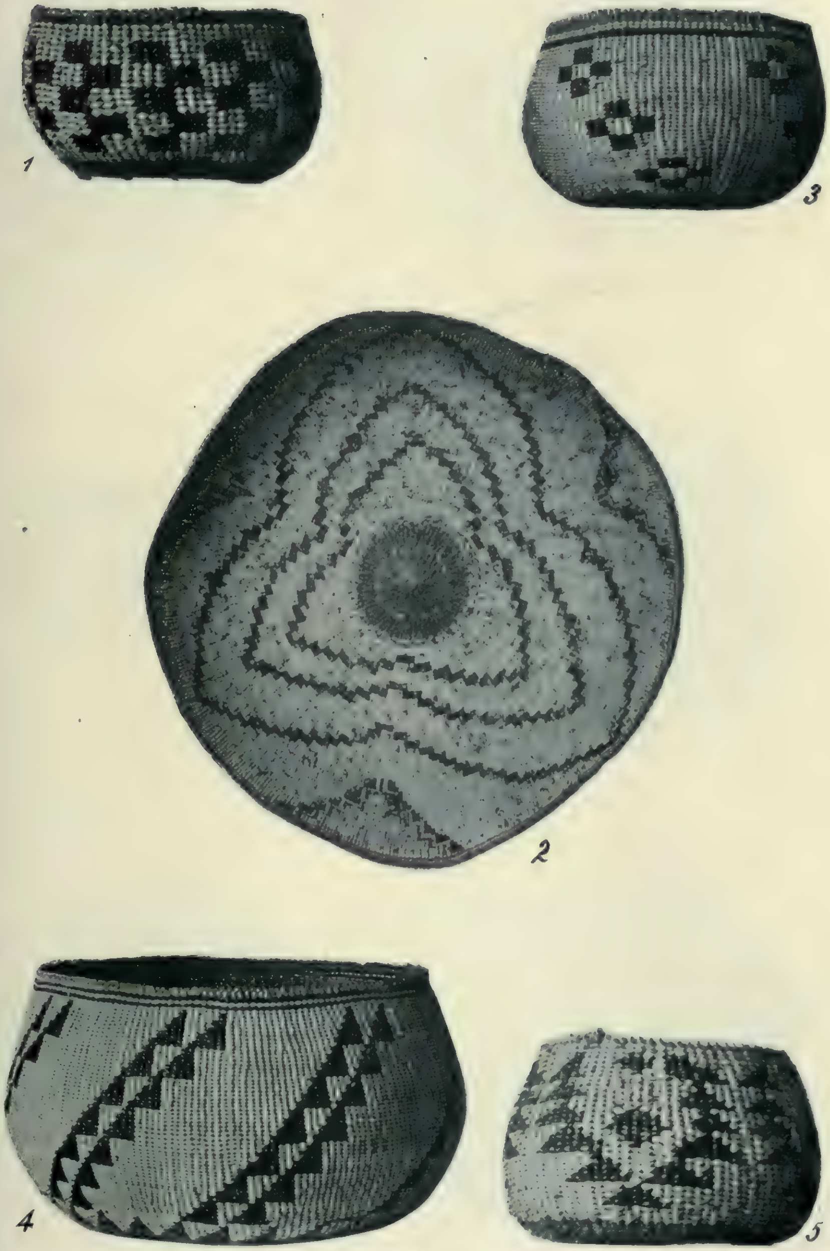
FIG. 1.—Basket with deer-excrement design. Height, 8 cm. Cat. No. $\frac{50}{1852}$.

FIG. 2.—Basket with deer-excrement design. Diameter, 51.5 cm. Cat. No. $\frac{50}{1835}$.

FIG. 3.—Basket with deer-excrement and "rough" or "crooked" design. Height, 8 cm. Cat. No. $\frac{50}{1843}$.

FIG. 4.—Basket with "rough" or "crooked" and arrow-point design. Height, 10.5 cm. Cat. No. $\frac{50}{1812}$.

FIG. 5.—Basket with arrow-point design. Height, 8 cm. Cat. No. $\frac{50}{1882}$.



PIT RIVER BASKETS.

EXPLANATION OF PLATE XXII.

PIT RIVER BASKETS.

FIG. 1.—Basket with design of unknown significance. Height, 7.5 cm. Cat. No. $\frac{50}{1654}$.

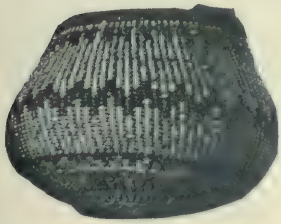
FIG. 2.—Basket with arrow-point (?) or flying-geese (?) design. Height, 12 cm. Cat. No. $\frac{50}{1620}$.

FIG. 3.—Basket with design of skunk's nose. Height, 19.5 cm. Cat. No. $\frac{50}{1626}$.

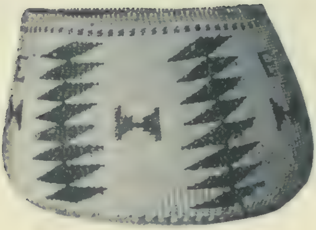
FIG. 4.—Basket with arrow-point design. Height, 23 cm. Cat. No. $\frac{50}{1622}$.

FIG. 5.—Basket with design of lizard (?) or owl's claw (?). Diameter, 12.5 cm. Cat. No. $\frac{50}{1646}$.

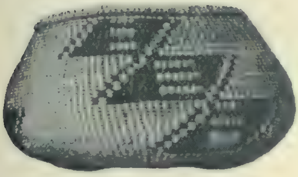
FIG. 6.—Basket with flying-geese (?) design. Height, 20 cm. Cat. No. $\frac{50}{1658}$.



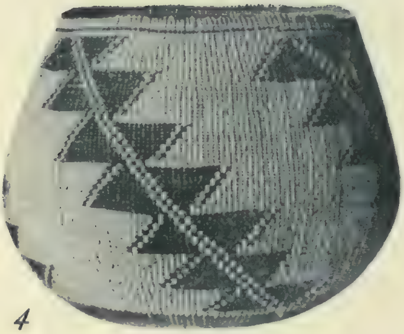
1



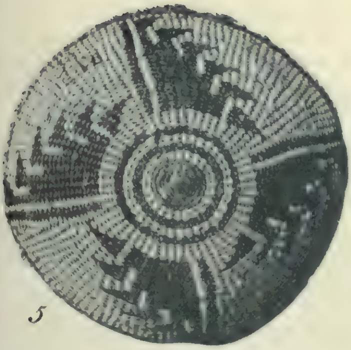
2



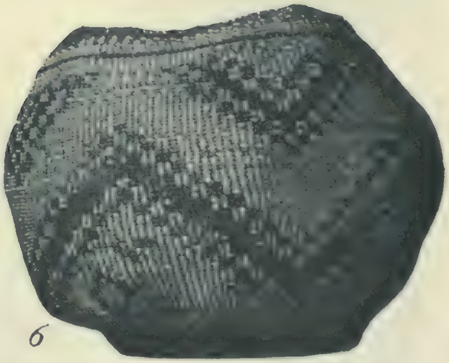
3



4



5



6

Pit River Baskets.

EXPLANATION OF PLATE XXIII.

WINTUN BASKETS.

Fig. 1.—Basket with design, at base, of arrow-points; above, of "bent elbow." Height, 18 cm. Cat. No. $\frac{50}{1702}$.

Fig. 2.—Basket with fish-tail design. Height, 9.5 cm. Cat. No. $\frac{50}{1700}$.

Fig. 3.—Basket with water-snake design. Height, 10.75 cm. Cat. No. $\frac{50}{1693}$.

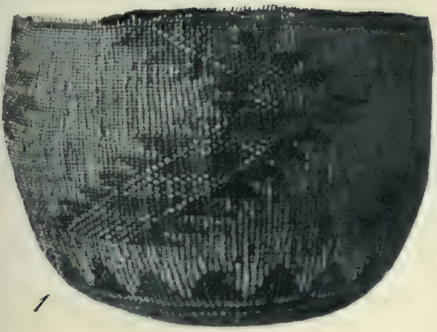
Fig. 4.—Basket with rattlesnake-head design. Height, 12 cm. Cat. No. $\frac{50}{1691}$.

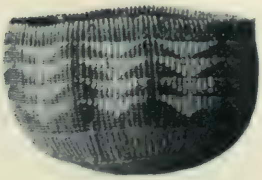
Fig. 5.—Basket with design of wolf's eye. Height, 10 cm. Cat. No. $\frac{50}{1691}$.

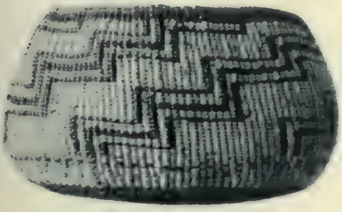
Fig. 6.—Basket with flying-geese design. Height, 9 cm. Cat. No. $\frac{50}{1701}$.

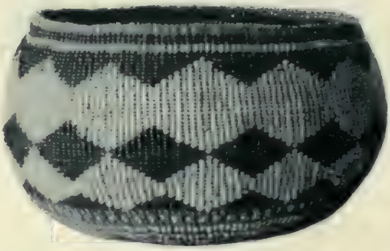
Fig. 7.—Basket with design, at base, of rattlesnake-heads (?); above, of flying geese; on the rim, of arrow-points. Height, 19.5 cm. Cat. No. $\frac{50}{1703}$.

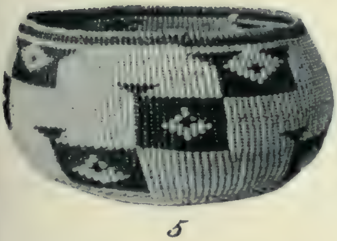
Fig. 8.—Basket with design below of bear's foot; above, of arrow-points. Height, 10 cm. Cat. No. $\frac{50}{1707}$.

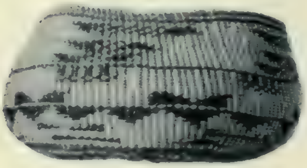

1


2

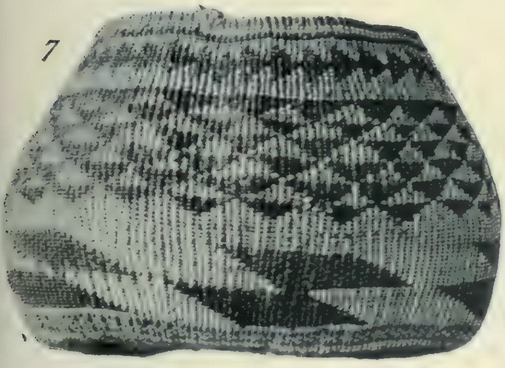

3


4

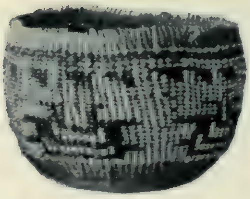

5


6

7



8



WINTUN BASKETS.

EXPLANATION OF PLATE XXIV.

WINTUN BASKETS.

FIG. 1.—Basket with "empty-spool" design. Height, 10 cm. Cat. No. $\frac{50}{1695}$.

FIG. 2.—Basket with "empty-spool" design. Height, 6 cm. Cat. No. $\frac{50}{1696}$.

FIG. 3.—Basket with design of "leaves strung along." Height, 12 cm. Cat. No. $\frac{50}{1692}$.

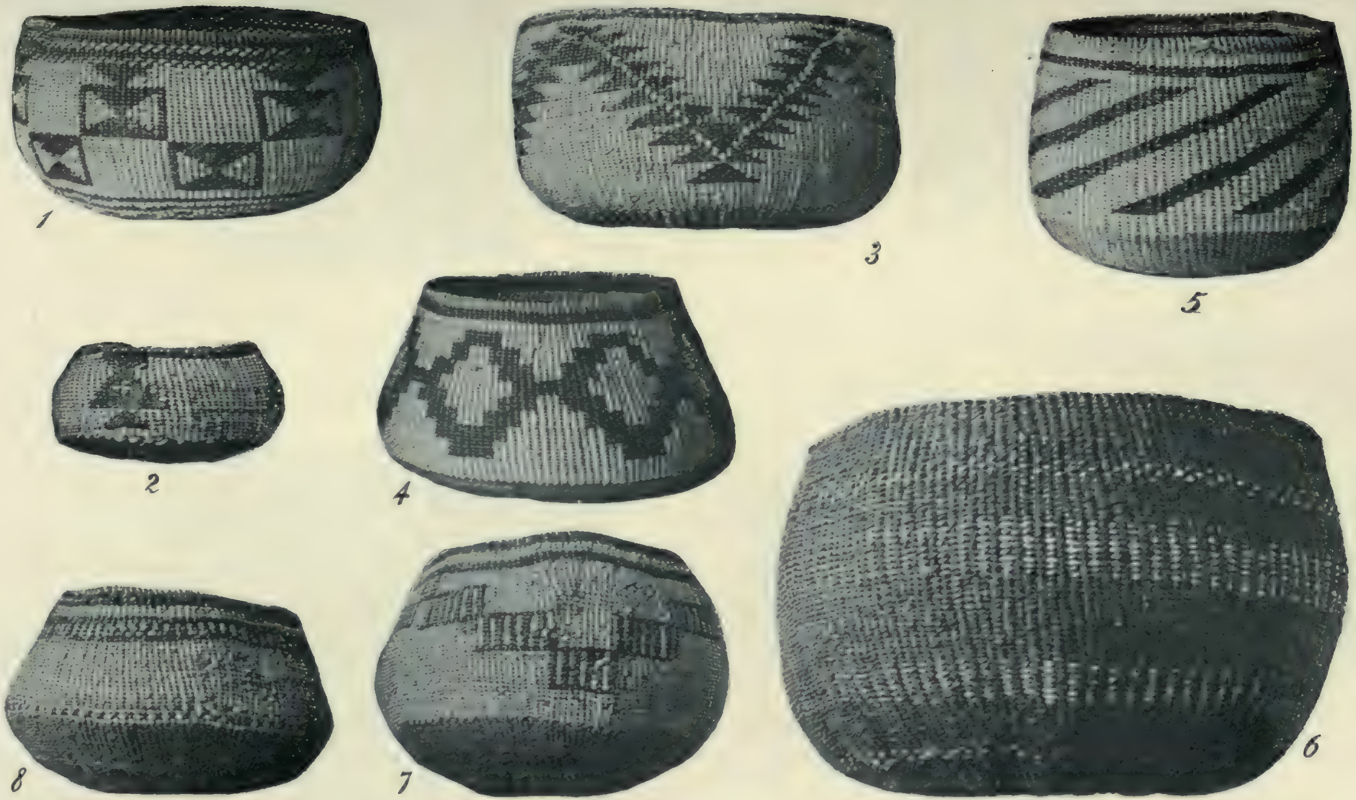
FIG. 4.—Basket with deer-excrement design. Height, 10.5 cm. Cat. No. $\frac{50}{1697}$.

FIG. 5.—Basket with "pulled-around" design. Height, 10.5 cm. Cat. No. $\frac{50}{1698}$.

FIG. 6.—Basket with "striped" design. Height, 22.5 cm. Cat. No. $\frac{50}{1699}$.

FIG. 7.—Basket with "striped" design. Height, 14 cm. Cat. No. $\frac{50}{1703}$.

FIG. 8.—Basket with design of cross-waves. Height, 9 cm. Cat. No. $\frac{50}{1701}$.



WINTUN BASKETS.

EXPLANATION OF PLATE XXV.

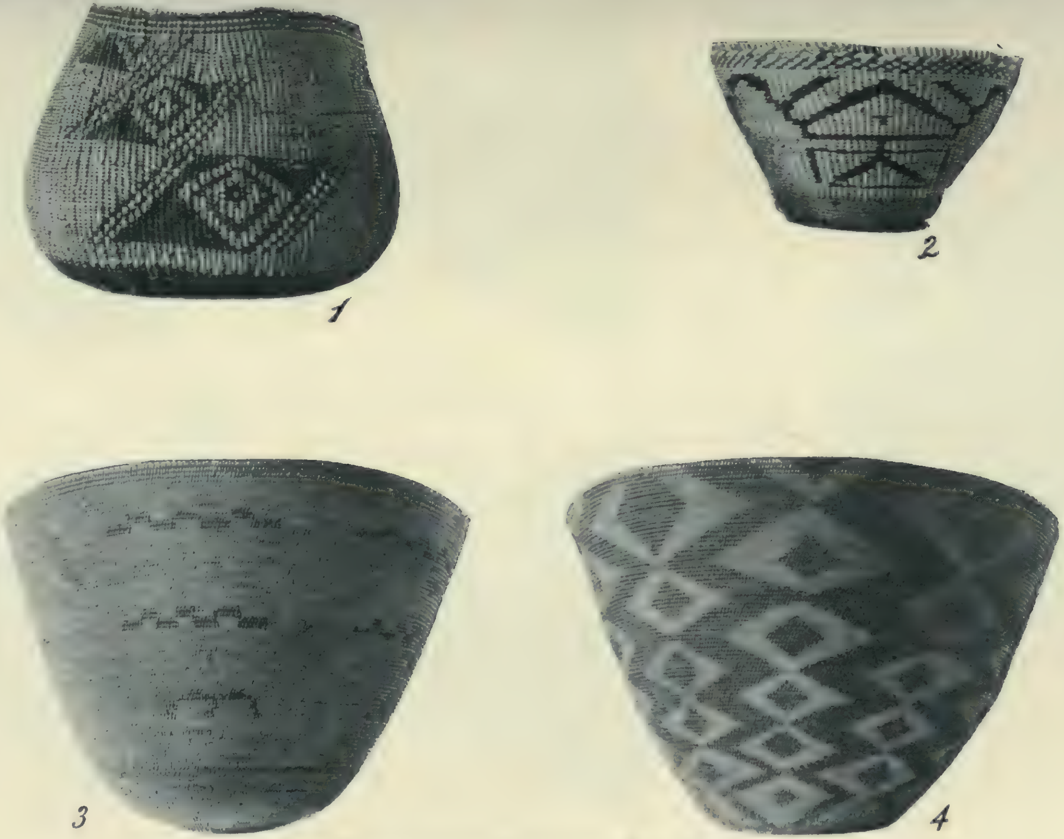
YANA AND MOQUELUMNIAN BASKETS.

FIG. 1.—Basket with wolf's-eye design (Yana). Height, 18.5 cm. Cat. No. $\frac{50}{1708}$.

FIG. 2.—Basket with house design (Yana). Height, 12.5 cm. Cat. No. $\frac{50}{1709}$.

FIG. 3.—Basket with design similar to the Maidu earthworm and Pit River deer-excrement pattern (Moquelumnian). Height, 31 cm. Cat. No. $\frac{50}{1567}$.

FIG. 4.—Basket with design similar to the rattlesnake and water-snake pattern of the southern Maidu (Moquelumnian). Height, 36 cm. Cat. No. $\frac{50}{1565}$.



Yana and Moquelumnian Baskets.

EXPLANATION OF PLATE XXVI.

MOQUELUMNIAN BASKETS.

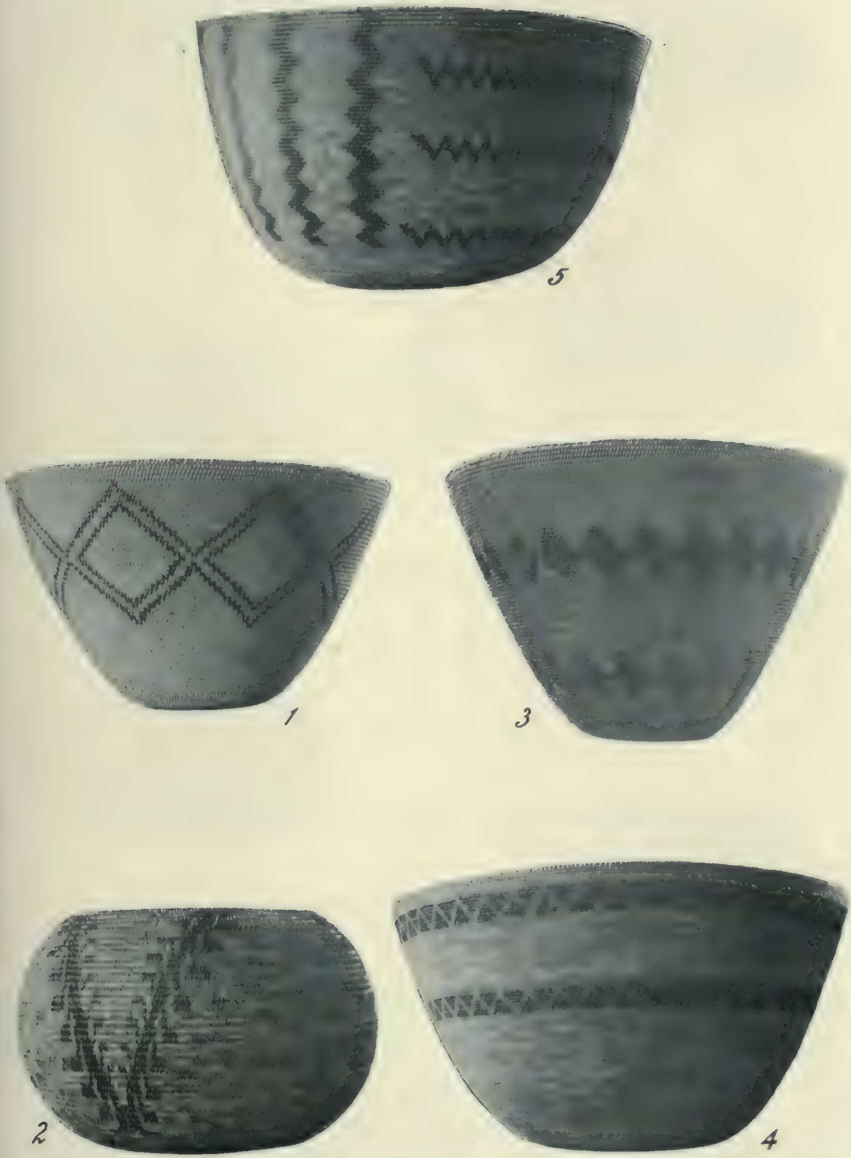
FIG. 1.—Basket with design similar to the "eye" and diamond pattern of the Maidu. Height, 22.5 cm. Cat. No. $\frac{50}{1566}$.

FIG. 2.—Basket with quail-tip design. Calaveras County. Height, 18.5 cm. Cat. No. $\frac{50}{1568}$.

FIG. 3.—Basket with design of unknown significance. Height, 30 cm. Cat. No. $\frac{50}{1560}$.

FIG. 4.—Basket with design of unknown significance. Height, 29 cm. Cat. No. $\frac{50}{1563}$.

FIG. 5.—Basket with design of unknown significance. Height, 25 cm. Cat. No. $\frac{50}{1567}$.



MOQUELUMNIAN BASKETS.

EXPLANATION OF PLATE XXVII.

POMO BASKETS.

FIG. 1.—Basket with design of quail-tip and red mountains. Height, 10 cm. Cat. No. $\frac{50}{779}$.

FIG. 2.—Basket with design of quail-tip and red mountains. Height, 5 cm. Cat. No. $\frac{50}{775}$.

FIG. 3.—Basket with design of quail-tip and red mountains. Height, 6.5 cm. Cat. No. $\frac{50}{790}$.

FIG. 4.—Basket with design of red mountains, quail-tip, and spotted skin of fawn. Height, 10.5 cm. Cat. No. $\frac{50}{765}$.

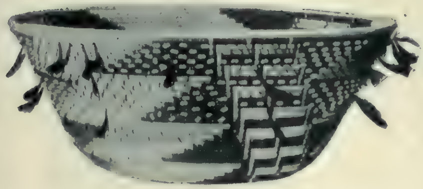
FIG. 5.—Basket with design of red mountains and quail-tip. Height, 7 cm. Cat. No. $\frac{50}{770}$.

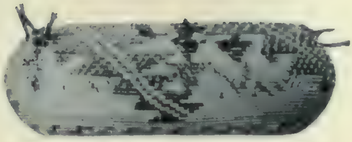
FIG. 6.—Basket with design of quail-tip and red mountains. Height, 6 cm. Cat. No. $\frac{50}{798}$.

FIG. 7.—Basket with design of red mountains and buckeye. Height, 5.5 cm. Cat. No. $\frac{50}{801}$.

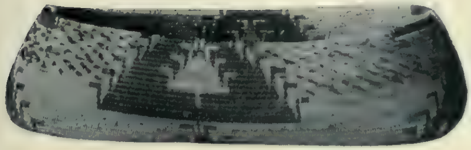
FIG. 8.—Basket with design of red mountains and grasshopper-leg. Height, 11 cm. Cat. No. $\frac{50}{791}$.

FIG. 9.—Basket with leaf design around the base, and mountains above. Height, 5.5 cm. Cat. No. $\frac{50}{794}$.

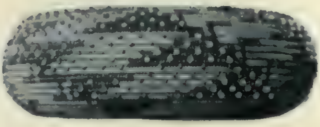




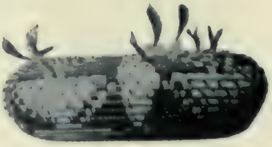
5



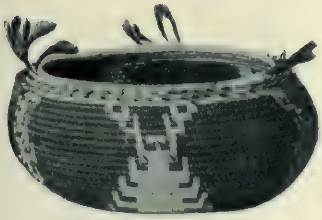
2



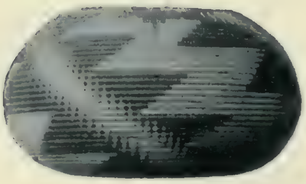
6



7

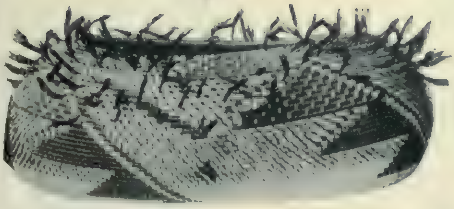


3

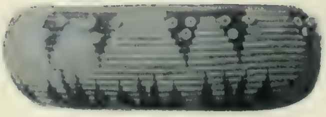


8

4



9



POMO BASKETS.

EXPLANATION OF PLATE XXVIII.

POMO BASKETS.

FIG. 1.—Basket with design of crossing trails and quail-tips. Height, 11.25 cm. Cat. No. $\frac{50}{764}$.

FIG. 2.—Basket with design of crossing trails and zigzag. Height, 3.5 cm. Cat. No. $\frac{50}{766}$.

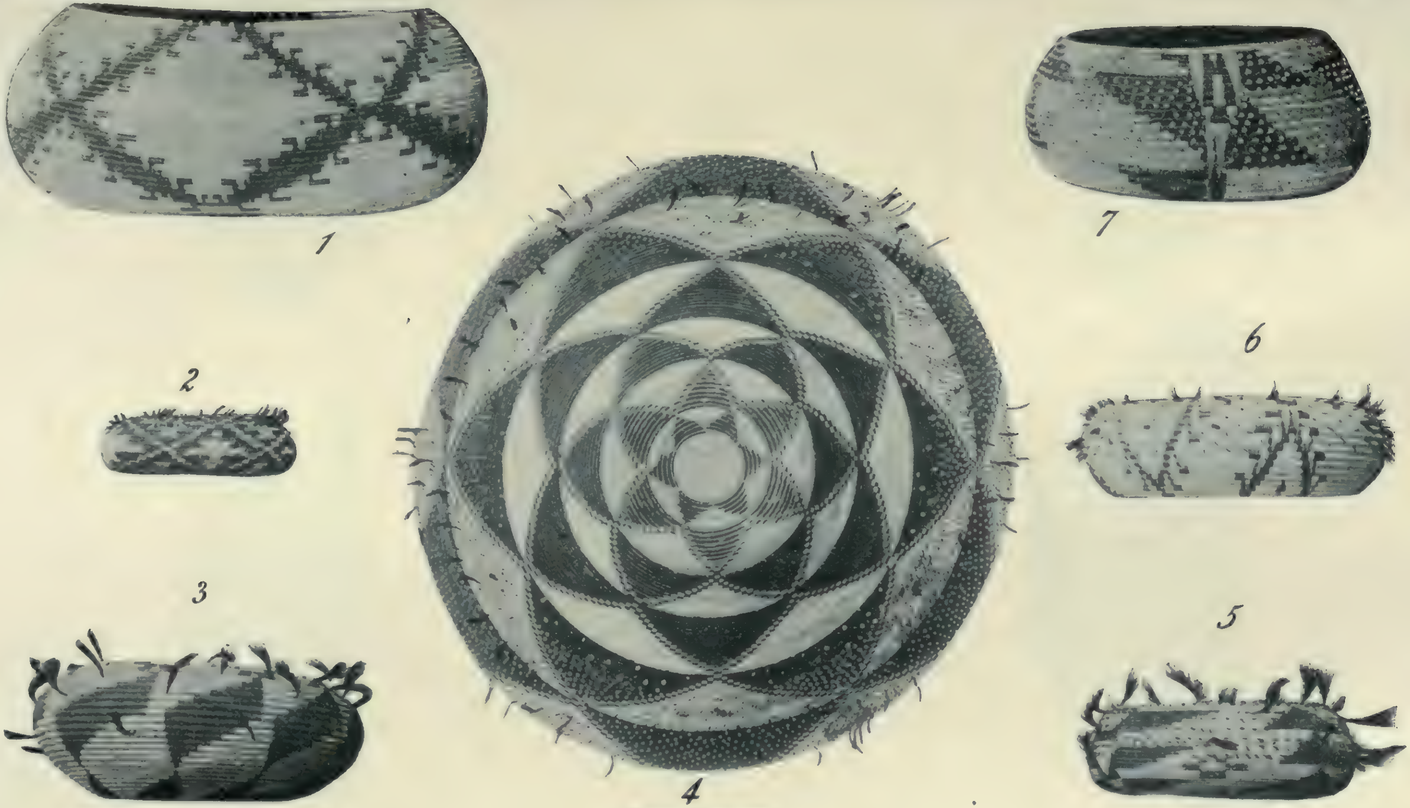
FIG. 3.—Basket with design of unknown significance. Height, 7.75 cm. Cat. No. $\frac{50}{785}$.

FIG. 4.—Basket with design of unknown significance. Diameter, 57.5 cm. Cat. No. $\frac{50}{782}$.

FIG. 5.—Basket with design of unknown significance. Height, 5.5 cm. Cat. No. $\frac{50}{788}$.

FIG. 6.—Basket with design of crossing trails and quail-tips. Height, 5.5 cm. Cat. No. $\frac{50}{803}$.

FIG. 7.—Basket with design of unknown significance. Height, 8.5 cm. Cat. No. $\frac{50}{776}$.



POMO BASKETS.

EXPLANATION OF PLATE XXIX.

POMO BASKETS.

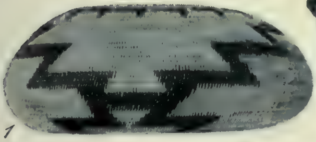
FIG. 1.—Basket with zigzag and quail-tip design. Height, 7.5 cm. Cat. No. $\frac{50}{777}$.

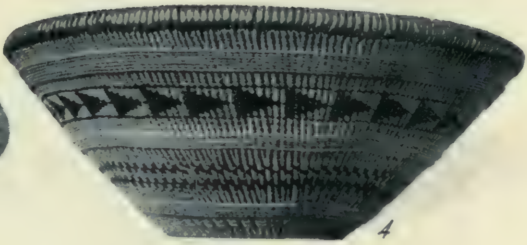
FIG. 2.—Basket with zigzag design. Height, 12 cm. Cat. No. $\frac{50}{817}$.

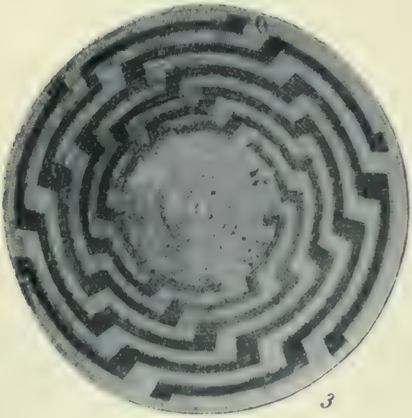
FIG. 3.—Basket with zigzag (?) design. Diameter, 39 cm. Cat. No. $\frac{50}{781}$.

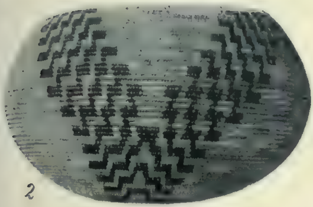
FIG. 4.—Basket with arrow-point design. Height, 15 cm. Cat. No. $\frac{50}{789}$.

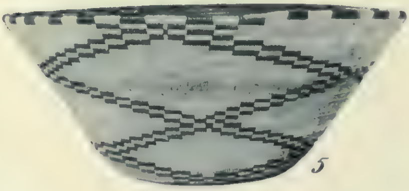
FIG. 5.—Basket with design of crossing trails. Height, 13.25 cm. Cat. No. $\frac{50}{795}$.


1


4


3


2


5

Pomo Baskets.

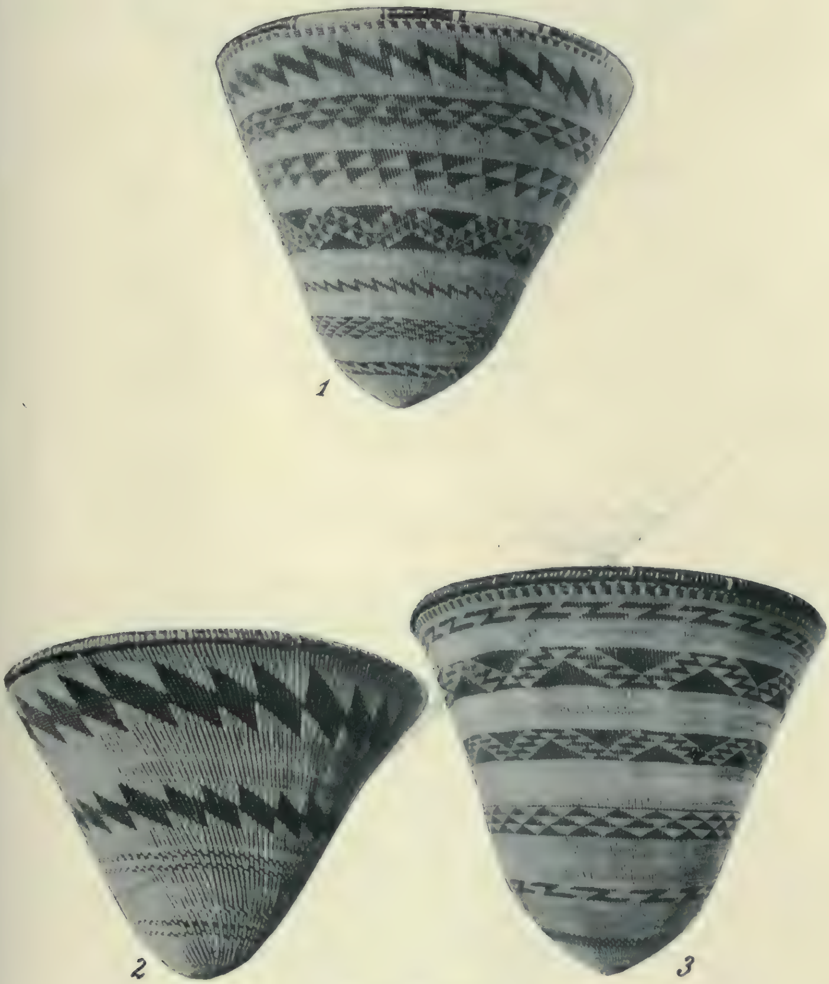
EXPLANATION OF PLATE XXX.

POMO BASKETS.

FIG. 1.—Basket with designs from below upward as follows: zigzag, red mountains, zigzag, red mountains and zigzag combined, half arrow-points, red mountains, zigzag, meshes in fishnet. Height, 39.5 cm. Cat. No. $\frac{50}{773}$.

FIG. 2.—Basket with design of unknown significance. Height, 29.5 cm. Cat. No. $\frac{50}{784}$.

FIG. 3.—Basket with designs from below upward as follows: zigzag, red mountains, red mountains and zigzag, red mountains and zigzag, zigzag, meshes in fishnet. Height, 48 cm. Cat. No. $\frac{50}{796}$.



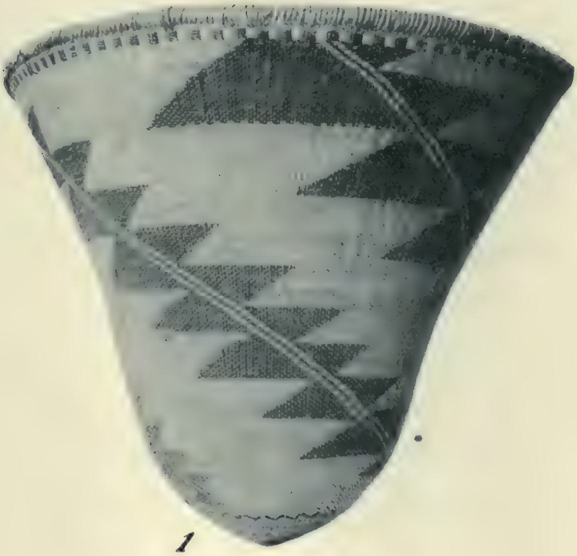
POMO BASKETS.

EXPLANATION OF PLATE XXXI.

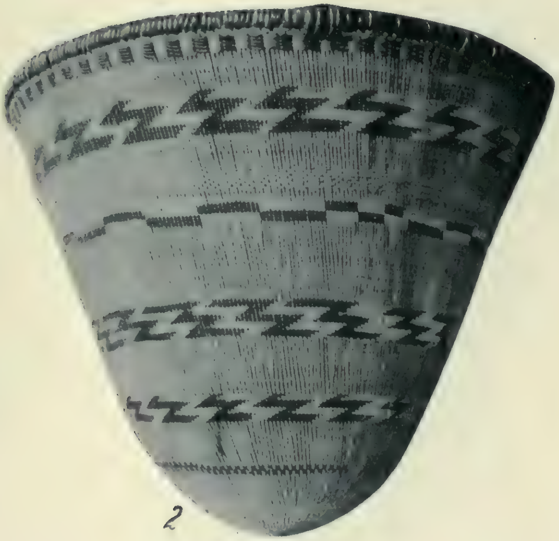
POMO BASKETS.

FIG. 1.—Basket with design of red mountains; round the rim, of meshes in fishnet. Height, 46.5 cm. Cat. No. $\frac{50}{780}$.

FIG. 2.—Basket with designs from below upward as follows: meshes in fishnet, zigzag, zigzag, meshes in fishnet, zigzag, meshes in fishnet. Height, 47.5 cm. Cat. No. $\frac{50}{774}$.



1



2

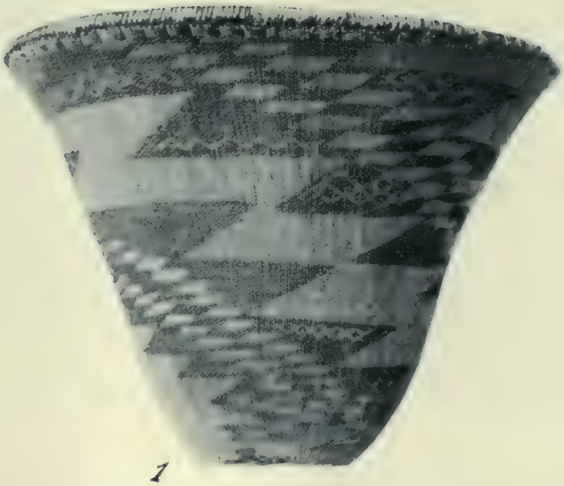
POMO BASKETS.

EXPLANATION OF PLATE XXXII.

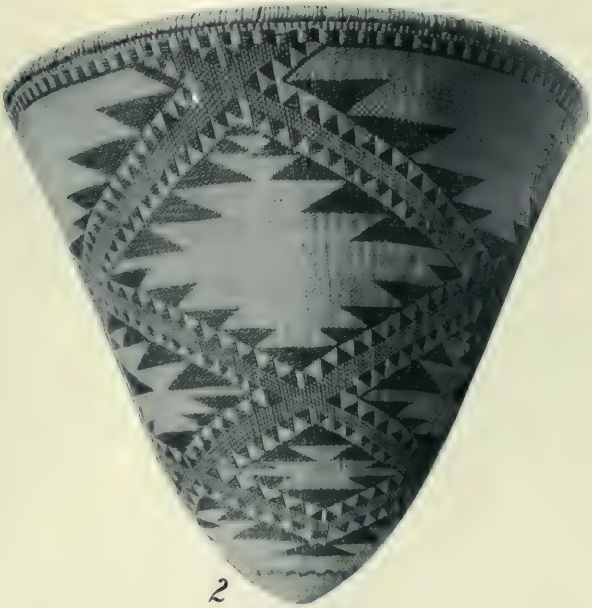
POMO BASKETS.

FIG. 1.—Basket with design of unknown significance. Height, 47.5 cm. Cat. No. $\frac{50}{768}$.

FIG. 2.—Basket with design of unknown significance. Height, 53 cm. Cat. No. $\frac{1}{2701}$.



1



2

Pomo Baskets.

EXPLANATION OF PLATE XXXIII.

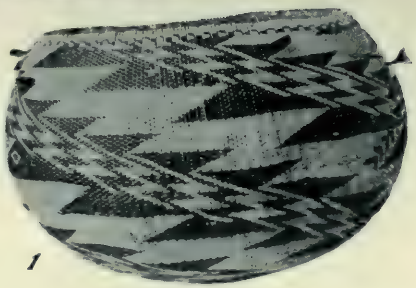
POMO BASKETS.

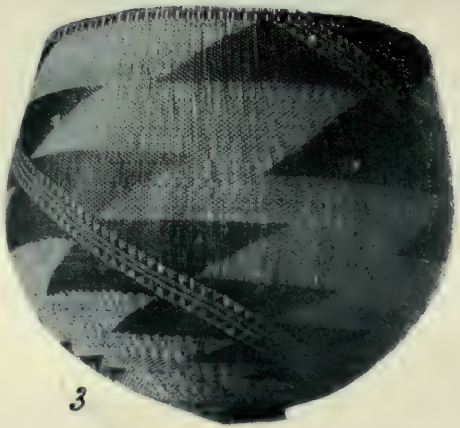
FIG. 1.—Basket with design of zigzag and red mountains. Height, 18 cm. Cat. No. $\frac{50}{771}$.

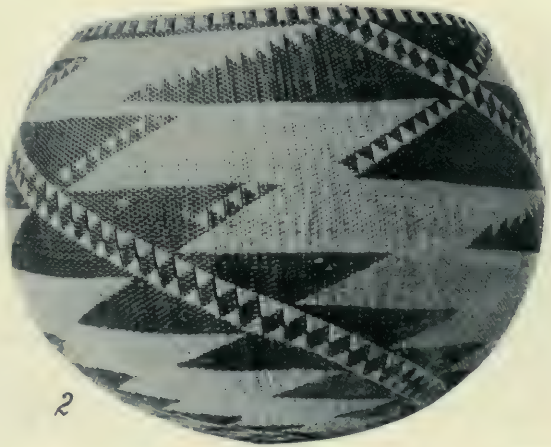
FIG. 2.—Basket with design of zigzag, red mountains, and arrowpoints. Height, 30 cm. Cat. No. $\frac{50}{807}$.

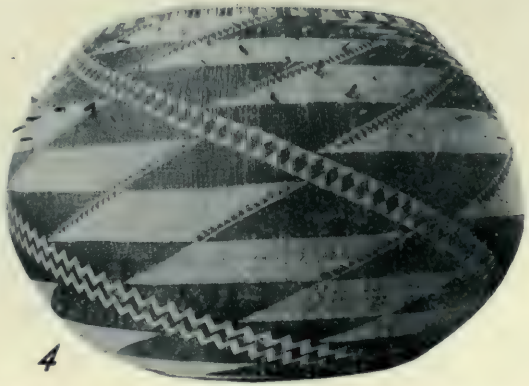
FIG. 3.—Basket with design of red mountains. Height, 25.5 cm. Cat. No. $\frac{1}{3702}$.

FIG. 4.—Basket with design of red mountains, zigzag, and arrowpoints. Height, 39.5 cm. Cat. No. $\frac{1}{3703}$.


1


3


2


4

POMO BASKETS.

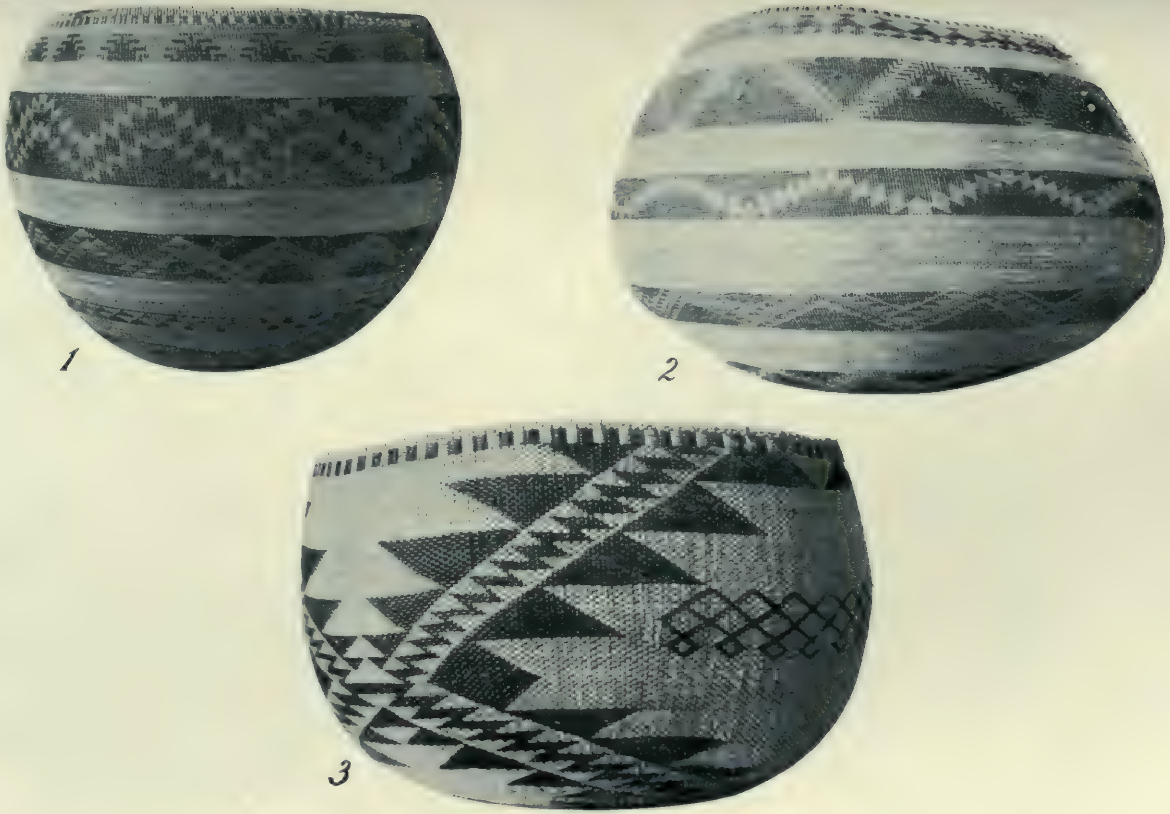
EXPLANATION OF PLATE XXXIV.

POMO BASKETS.

Fig. 1.—Basket with designs from below upward as follows: crow's tracks, red mountains, red mountains, zigzag, buckeye-trees, meshes in fishnet. Height, 34.5 cm. Cat. No. $\frac{50}{787}$.

Fig. 2.—Basket with designs from below upward as follows: red mountains, red mountains, zigzag, buckeye-trees, design of unknown significance, meshes in fishnet. Height, 55.5 cm. Cat. No. $\frac{50}{802}$.

Fig. 3.—Basket with designs of crossing tracks, zigzag, red mountains; around the rim, meshes in fishnet; design on the right not explained. Height, 27 cm. Cat. No. $\frac{50}{778}$.



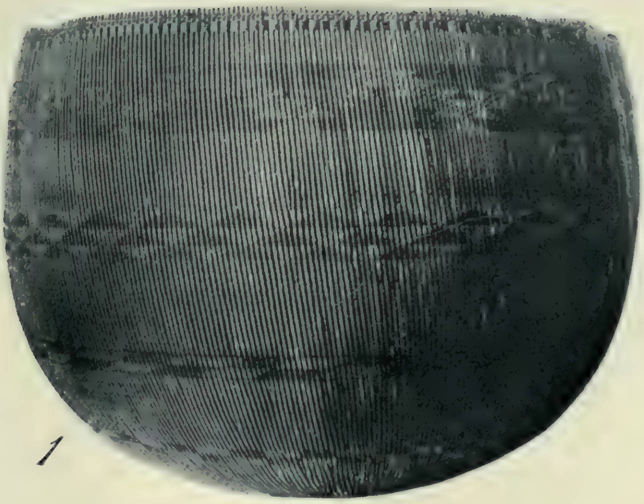
POMO BASKETS.

EXPLANATION OF PLATE XXXV.

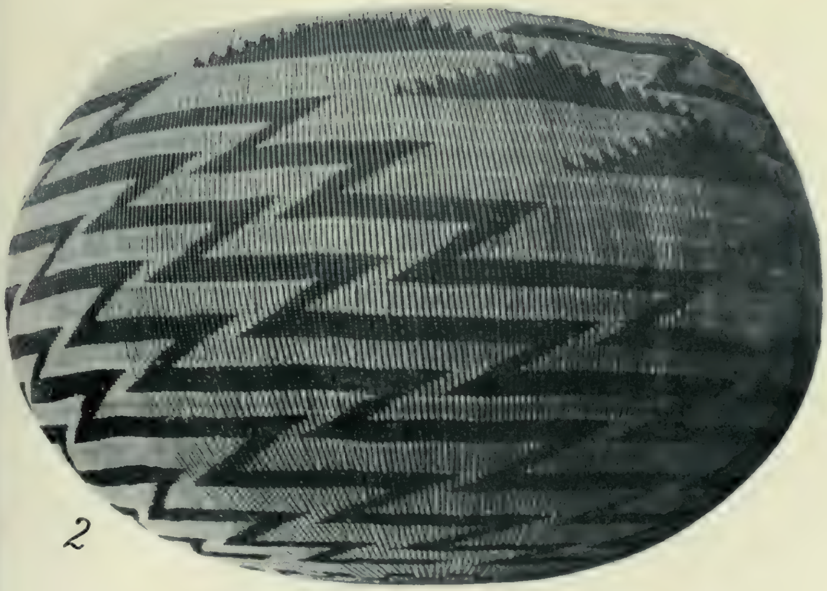
POMO BASKETS.

FIG. 1.—Basket with designs from below upward as follows: meshes in fishnet, crow's tracks, red mountains, zigzag, meshes in fishnet. Height, 44.5 cm. Cat. No. $\frac{50}{811}$.

FIG. 2.—Basket with zigzag design, a break in the design. Height, 37 cm. Cat. No. $\frac{50}{792}$.



1



2

POMO BASKETS.

EXPLANATION OF PLATE XXXVI.

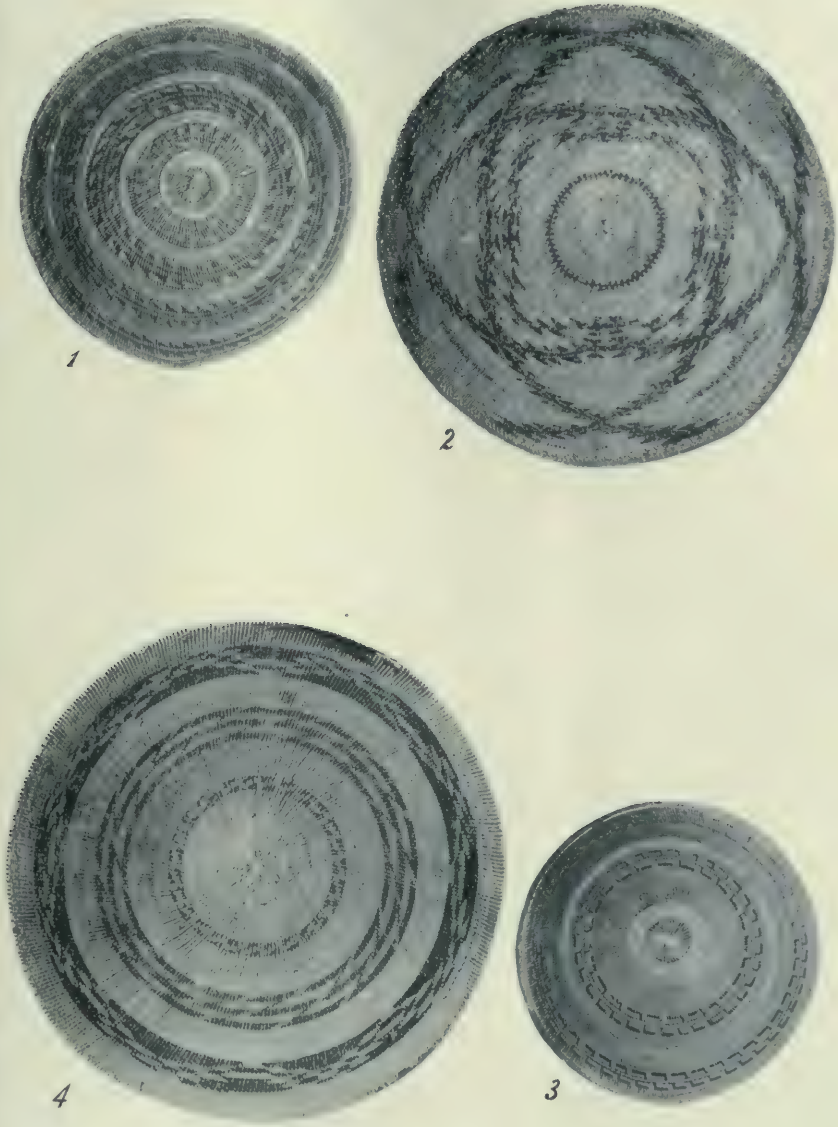
POMO BASKETS.

FIG. 1.—Basket with arrow-point design. Diameter, 47.5 cm. Cat. No. $\frac{50}{813}$.

FIG. 2.—Basket with design of crossing tracks (?). Diameter, 50 cm. Cat. No. $\frac{50}{789}$.

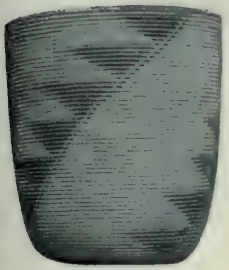
FIG. 3.—Basket with zigzag design. Diameter, 41 cm. Cat. No. $\frac{50}{814}$.

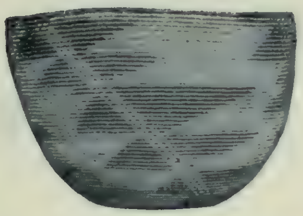
FIG. 4.—Basket with quail-tip design. Diameter, 56 cm. Cat. No. $\frac{50}{772}$.



POMO BASKETS.

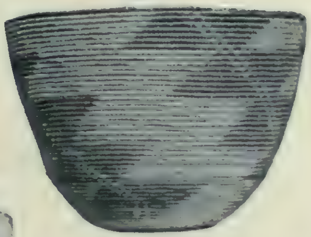
1



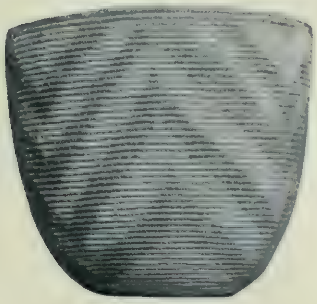


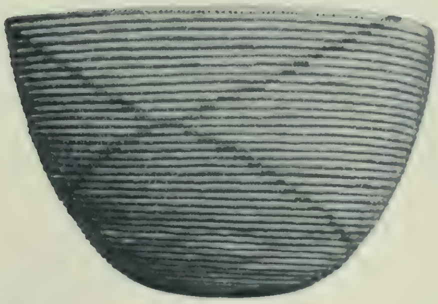
2

3



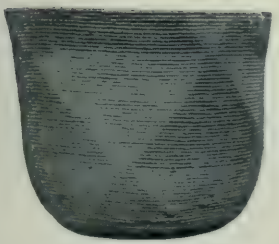
4



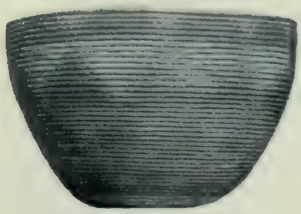


7

5



6



East African Baskets.

II.—MAIDU MYTHS.

By Roland B. Dixon.

Introductory.

The Maidu Indians, from whom the myths here recorded were obtained, may be said, for the present at least, to constitute an independent stock, occupying a considerable area in the northeastern part of California. On the north the Maidu territory seems to have been bounded by a line running from Lassen Peak to Honey Lake, and thence south to the eastern crest of the Sierras. On the east this crest was practically the limit as far as the extreme southern extension of the stock, at the heads of the south fork of the American River and the Cosumnes. The Washoes about Lake Tahoe doubtless forced their way at times a little over the crest, and at best this crest-line was more or less debatable ground. On the south the stock appears to have extended to the middle fork of the Cosumnes, which river forms their southern limit all the way to its confluence with the Sacramento. On the west the latter river was in general the boundary-line as far north as Chico, whence the line ran, it would seem, along Deer Creek, back to Lassen Peak.

The Maidu is spoken in three dialects, which may be designated as the northeastern, the northwestern, and the southern. The first of these is spoken by that portion of the stock living in the chain of broad, flat-floored valleys in the higher Sierra, beginning with Big Meadows in the north, and ending with Sierra Valley in the south. The second group occupies all the western slope of the Sierras and the Sacramento Valley north of the Yuba River. The third group comprises all the remainder, and, roughly speaking, is synonymous with the Nishinam of Powers. The various groups came into contact with different stocks in varying degree, and all show the influence of such contact. The northeastern group came into close contact with their northern neighbors the Achomā'wi, or Pit River Indians, and with the Piutes who border them on the east. The northwestern group were associated with the Wintun of the west side of the Sacramento River, and with the Yana who occupied the east side of the river, above Deer Creek. The southern section of the Maidu stock were in contact with the Washoes, with peoples of the so-called Moquelumnan stock, and with the Wintuns. The contact of the sections of the stock with different neighbors led to noticeable differences in culture, myth, and dialect ; and these tendencies toward varying cultures were in many cases reenforced by considerable differences of environment.

Although there were differences, as just pointed out, the customs of the Maidu were, on the whole, of the same general type throughout. All were a hunting and fishing people, dependent in large measure, however, on the acorn and various seeds and roots. Originally they went about nearly if not quite naked; only in the winter season and in the mountains they wore robes of deer-skin, or mantles woven of rabbit-fur cut in long strips. Moccasins seem to have been worn more in the mountains than in the Sacramento Valley, although in the latter region they were used to a considerable extent. No covering was worn on the head, as a rule; but it seems that the net-cap (wī'ka), used chiefly at dances, was sometimes worn as an every-day covering. Their dwellings varied somewhat according to locality, the heavy snows and cold weather of the mountains requiring a more solid and warmer house than the mild winters of the Sacramento Valley. In general, however, the houses were alike, and were circular, semi-subterranean lodges from fifteen to twenty-five feet or more in diameter, and from ten to fifteen feet high. They were made by excavating to a depth of some three feet, and lining the sides of the excavation with posts or split logs some four or five feet high. These were set on end, and formed substantial walls. A solid conical roof was erected over the enclosure thus made, the supporting beams resting on several posts, and meeting at the centre. A smoke-hole was left in the middle, and a small door cut at one side, this door being very low, and forcing the person entering to crawl on all-fours in many cases. The roof was thickly covered with earth. The resulting house, or sweat-house, as it is generally called to-day, was in winter both warm and dry, and in summer, owing to the heavy earth covering, delightfully cool. Summer shelters and less elaborate huts were built of branches and large splinters of fallen trees placed together in conical form. Light brush shelters, consisting of a mere roof of brush, and open on all sides, were also much used.

In their social organization the Maidu showed apparently a complete lack of any clan organization or totemic grouping. They were grouped loosely in village communities which seem to have been by no means firmly knit. The villages were usually composed of but few houses, each of which was the residence of several families related by blood. There are known to-day a large number of village sites, all of which cannot have been simultaneously inhabited; and it seems not unlikely that the people of a village, after living for some years at one spot, moved, or perhaps divided, and, either in whole or in part, settled on a site that had been inhabited some years or even generations before. If all the known village sites had been inhabited at the same time, the population of the region would have been incredibly dense; and I believe that the earlier estimates of the population of this and other sections of California were erroneous, owing to the fact that it was supposed that all the villages known had at one time been simultaneously inhabited. Each village had its chief, but his power was comparatively slight. The villages were constantly involved in petty quarrels, which were usually settled with but little loss of blood.

The chief ceremonials in the religion of the Maidu were the initiatory ceremonies for the boys or young men at or about the age of puberty, and the great annual "burning" for the dead. The former ceremony appears to have been best developed among the northwestern branch of the stock, and exists in a much less perfect form among the southern section. Boys are initiated at the age of twelve years or thereabouts.

Not all boys go through the ceremony, the ones who are to undergo it being chosen by the old men every year. After initiation, the men were known as "Yĕ'poni," and were much looked up to. They formed a sort of secret society, and included all the men of note in the tribe. The ceremonies were more or less elaborate, involving fasts, instruction in the myths and lore of the tribe by the older men, and finally a great feast and dance, at which the neophytes for the first time performed their dances, which were probably received through visions. The "burning" in honor of the dead usually occurred in October, the exact date depending on the moon's phases. It is probable that the dead were burned throughout the Maidu area, but many contradictory statements make it somewhat difficult to settle this matter definitely at present. The "burning," already alluded to as one of the two great ceremonies of the Maidu, was not that of the body of the dead, but of offerings of various sorts, — a common ceremonial for the dead, in which the whole village or several villages joined. At the appointed time the people assemble, and after various preliminary ceremonies the relatives of all those persons who have recently died consign to the flames large amounts of property of all sorts, — baskets, clothes, food, etc., — accompanying the act with wailing and songs. At the first "burning" which occurs after the death of a person, an image representing the deceased, made of skins and stuffed, is often burned, together with the gifts. The sacrifice of property to the dead is not, as a rule, continued beyond two or three years, but in some cases offerings have been made annually for ten or fifteen years. From various accounts it would seem that at times the widows attempted to throw themselves into the funeral pyres of their husbands, and also burned themselves severely at the "burnings."

The mythology of the Maidu presents many features of interest. No adequate comparative discussion of the material is yet possible, inasmuch as, with the exception of the Wintun and Yana, we know practically nothing of the myths of the neighboring stocks of California, Oregon, and Nevada. When material from these regions shall have been collected, we may be able to clear up many points now obscure. With few exceptions, the myths here presented were told in English, and are almost exclusively from the two northern sections of the stock. While the time has not yet come for any detailed discussion of the points of agreement or disagreement of these myths with those of the more remote tribes and stocks of the country, several of the more noticeable similarities to those of the neighboring stocks may be pointed out.

The first of the myths here given, describing the creation and subsequent events, shows several points of similarity to myths of the neighboring stocks of the Wintun, Yana, Pit River, and Shasta Indians. In myths of nearly all these peoples we find men brought into being from sticks; and in all of them the Coyote plays the same part of marplot, opposing himself to the intention to make man's life easy, laborless, and deathless. The Coyote decides that man must work, suffer, and die; and his own son is the first to bear the penalty of the decision, which the Coyote, in his grief, in vain tries to repeal. Indeed, we find much the same idea among the Shoshone tribes to the eastward of the Maidu, for Powell records a similar struggle between the two Wolf brothers who figure so prominently in the Ute mythology.[1] The presence of the well-known Algonkian incident of the diving for mud with which to make the world, is of interest as giving another example of its wide distribution. In the story of the Earth-Namer we have a number of incidents (lacking in the other tale) describing the destruction or metamorphosis of various evil beings and monsters by the Earth-Namer, who here approaches the type of the Transformer of the Northwest coast. This type appears again, although less clearly, in the two versions of the Conqueror story, where one of a pair of twins of miraculous birth performs great deeds and rids the country of the evil beings who destroyed his ancestors.

In the myths which follow there are many which are similar to, and one or two which are identical with, myths of the surrounding stocks. These similarities are most marked, perhaps, in the stories of the Thunder's Daughter, the Loon

---

[1] J. W. Powell, First Report Bureau of Ethnology, pp. 44, 45.

Woman, and the Bear and Deer. In these myths and in several of the others we have incidents which are current as far north as British Columbia, and offer interesting examples of widely distributed myth-incidents. The figure of the Coyote is prominent. He seems to be generally inimical to mankind, and appears often as a buffoon and trickster, who comes out of his adventures in a sorry plight.

As to analogies or similarities between the myths of the Maidu and those of the various stocks to the southward, little can be said at present. Virtually nothing is known of the mythology of these stocks in the southern part of California. In the meagre accounts of the Indians of San Juan Capistrano (Shoshonean) by Boscana we find several rather vague similarities to the Conqueror stories of the Maidu. The Coyote is a person of importance, and it is at least curious to find that he bears here a name (Eno) almost identical with that in use by the Maidu of the western slope of the northern Sierra (Heno). As will be apparent from the myths here given, there are many evidences of the widespread incorporation of foreign incidents, and even of the adoption of whole myths. As stated before, our knowledge of the mythology of the surrounding stocks is as yet too slight to enable us with profit to make a detailed study of such incidents, or to attempt to trace them to their origin. When such material shall be available, it would seem probable that many most interesting examples of the intermingling of northern and southern elements will be apparent, and enable us perhaps to trace more accurately the lines of migration and the mutual relationships of the great mass of stocks scattered along the Pacific coast from the Columbia River to Mexico.

In the references which follow, only the more striking cases of similarity are pointed out between the Maidu myths on the one hand and those collected by Boas,[1] Curtin,[2] Teit,[3]

---

[1] F. Boas, Indianische Sagen von der Nord-Pacifischen Küste Amerikas, Berlin, 1895 (quoted *l. c.*). Traditions of the Tillamook (Journal of American Folk-Lore, Vol. XI, pp. 23 and 133); Kathlamet Texts (Bulletin Bureau of American Ethnology, Washington, 1901).

[2] J. Curtin, Creation Myths of Primitive America. Boston, 1898.

[3] J. Teit, Traditions of the Thompson River Indians of British Columbia (Memoirs of the American Folk-Lore Society, Vol. VI).

Gatschet,[1] Powers,[2] Powell,[3] Kroeber,[4] Farrand,[5] and Burns,[6] on the other.

1. *Creation Myth.*[7]

In the beginning there was no sun, no moon, no stars. All was dark, and everywhere there was only water. A raft came floating on the water. It came from the north, and in it were two persons,—Turtle (A'nōsma) and Father-of-the-Secret-Society (Pehē'ipĕ).[8] The stream flowed very rapidly. Then from the sky a rope of feathers, called Pō'kelma, was let down, and down it came Earth-Initiate. When he reached the end of the rope, he tied it to the bow of the raft, and stepped in. His face was covered and was never seen, but his body shone like the sun. He sat down, and for a long time said nothing. At last Turtle said, "Where do you come from?" and Earth-Initiate answered, "I come from above." Then Turtle said, "Brother, can you not make for me some good dry land, so that I may sometimes come up out of the water?" Then he asked another time, "Are there going to be any people in the world?" Earth-Initiate thought awhile, then said, "Yes." Turtle asked, "How long before you are going to make people?" Earth-Initiate replied, "I don't know. You want to have some dry land: well, how am I going to get any earth to make it of?" Turtle answered, "If you will tie a rock about my left arm, I'll dive for some." Earth-Initiate did as Turtle asked, and then, reaching around, took the end of a rope from somewhere, and tied it to Turtle. When Earth-Initiate came to the raft, there was no rope there: he just reached out and found one. Turtle said, "If the rope is not long enough, I'll jerk it once, and you must haul me up; if it is long enough, I'll give two jerks, and then you must pull me up quickly, as I shall have all the earth that I can carry." Just as Turtle went over the side of the boat, Father-of-the-Secret-Society began to shout loudly.

---

[1] A. S. Gatschet, The Klamath Indians of South-western Oregon (Contributions to North American Ethnology, Vol. II, Part 1).

[2] S. Powers, Tribes of California (Contributions to North American Ethnology, Vol. III).

[3] J. W. Powell, Sketch of the Mythology of the North American Indians (First Report of the Bureau of American Ethnology).

[4] A. L. Kroeber, Ute Tales (Journal of American Folk-Lore, Vol. XIV, pp. 252 et seq.).

[5] L. Farrand, Traditions of the Chilcotin (Memoirs American Museum of Natural History, Vol. IV, Part I); Traditions of the Quinault Indians (Memoirs American Museum of Natural History, Vol. IV, Part III).

[6] L. M. Burns, Digger Indian Tales (Land of Sunshine, Vol. XIV, pp. 130 et seq.).

[7] Told at Chico. Compare Curtin, *l. c.*, pp. 163 et seq.; Powell, *l. c.*, p. 44; Powers, *l. c.*, pp. 292 et seq.; Farrand, Quinault, p. 111.

[8] The Pehē'ipĕ is to-day a participant in the dances of the Secret Society, and usually plays the part of a clown.

Turtle was gone a long time. He was gone six years; and when he came up, he was covered with green slime, he had been down so long. When he reached the top of the water, the only earth he had was a very little under his nails: the rest had all washed away. Earth-Initiate took with his right hand a stone knife from under his left armpit, and carefully scraped the earth out from under Turtle's nails. He put the earth in the palm of his hand, and rolled it about till it was round; it was as large as a small pebble. He laid it on the stern of the raft. By and by he went to look at it: it had not grown at all. The third time that he went to look at it, it had grown so that it could be spanned by the arms. The fourth time he looked, it was as big as the world, the raft was aground, and all around were mountains as far as he could see. The raft came ashore at Ta'doikö, and the place can be seen to-day.[1]

When the raft had come to land, Turtle said, "I can't stay in the dark all the time. Can't you make a light, so that I can see?" Earth-Initiate replied, "Let us get out of the raft, and then we will see what we can do." So all three got out. Then Earth-Initiate said, "Look that way, to the east! I am going to tell my sister to come up." Then it began to grow light, and day began to break; then Father-of-the-Secret-Society began to shout loudly, and the sun came up. Turtle said, "Which way is the sun going to travel?" Earth-Initiate answered, "I'll tell her to go this way, and go down there." After the sun went down, Father-of-the-Secret-Society began to cry and shout again, and it grew very dark. Earth-Initiate said, "I'll tell my brother to come up." Then the moon rose. Then Earth-Initiate asked Turtle and Father-of-the-Secret-Society, "How do you like it?" and they both answered, "It is very good." Then Turtle asked, "Is that all you are going to do for us?" and

---

[1] Compare Boas, *l. c.*, p. 173; Powers, *l. c.*, p. 383.

Earth-Initiate answered, "No, I am going to do more yet." Then he called the stars each by its name, and they came out. When this was done, Turtle asked, "Now what shall we do?" Earth-Initiate replied, "Wait, and I'll show you." Then he made a tree grow at Ta′doikō, — the tree called Hu′kīmtsa; and Earth-Initiate and Turtle and Father-of-the-Secret-Society sat in its shade for two days. The tree was very large, and had twelve different kinds of acorns growing on it.

After they had sat for two days under the tree, they all went off to see the world that Earth-Initiate had made. They started at sunrise, and were back by sunset. Earth-Initiate travelled so fast that all they could see was a ball of fire flashing about under the ground and the water. While they were gone, Coyote (Olä′li) and his dog Rattlesnake (Ka′udi *or* So′la) came up out of the ground. It is said that Coyote could see Earth-Initiate's face. When Earth-Initiate and the others came back, they found Coyote at Ta′doikö. All five of them then built huts for themselves, and lived there at Ta′doikö, but no one could go inside of Earth-Initiate's house. Soon after the travellers came back, Earth-Initiate called the birds from the air, and made the trees and then the animals. He took some mud, and of this made first a deer; after that, he made all the other animals. Sometimes Turtle would say, "That does not look well: can't you make it some other way?"

Some time after this, Earth-Initiate and Coyote were at Marysville Buttes (E′stobüsin yā′mani). Earth-Initiate said, "I am going to make people." In the middle of the afternoon he began, for he had returned to Ta′doikō. He took dark red earth, mixed it with water, and made two figures, — one a man, and one a woman. He laid the man on his right side, and the woman on his left, inside his house. Then he lay down himself, flat on his back, with his arms stretched out. He lay thus and sweated all the afternoon and night. Early in the morning the woman began to tickle him in the side. He kept very still, did not laugh. By and by he got up, thrust a piece of pitch-wood into the ground, and fire burst out. The two people were very white. No one to-day is as white as they were. Their eyes were pink, their hair was black, their teeth shone brightly, and they were very handsome. It is said that Earth-Initiate did not finish the hands of the people, as he did not know how it would be best to do it. Coyote saw the people, and suggested that they ought to have hands like his. Earth-Initiate said, "No, their hands shall be like mine." Then he finished them. When Coyote asked why their hands were to be like that, Earth-Initiate answered, "So that, if they are chased by bears, they can climb trees." This first man was called Ku′ksū; and the woman, Morning-Star Woman (La′idamlūlüm kü′lĕ).

When Coyote had seen the two people, he asked Earth-Initiate how he had made them. When he was told, he thought, "That is not difficult. I'll do it myself." He did just as Earth-Initiate had told him, but could not help laughing, when, early in the morning, the woman poked him in the ribs. As a result of his failing to keep still, the people were glass-eyed. Earth-Initiate said, "I told you not to laugh," but Coyote declared he had not. This was the first lie.[1]

By and by there came to be a good many people. Earth-Initiate had wanted to have everything comfortable and easy for people, so that none of them should have to work. All fruits were easy to obtain, no one was ever to get sick and die. As the people grew numerous, Earth-Initiate did not come as often as formerly, he only came to see Ku′ksū in the night. One night he said to him, "To-morrow morning you must go to the little lake near here. Take all the people with you. I'll make you a very old man before you get to the lake." So in the morning Ku′ksū collected all the people, and went to the lake. By the time he had reached it, he was a very old man. He fell into the lake, and sank down out of sight. Pretty soon the ground began to shake, the waves overflowed the shore, and there was a great roaring under the water, like thunder. By and by Ku'ksū came up out of the water, but young again, just like a young man. Then Earth-Initiate came and spoke to the people, and said, "If you do as I tell you, everything will be well. When any of you grow old, so old that you cannot walk, come to this lake, or get some one to bring you here. You must then go down into the water as you have seen Ku'ksū do, and you will come out young again." When he had said this, he went away. He left in the night, and went up above.

---

[1] Compare Curtin, *l. c.*, p. 484. Both the Yana and the Pit River Indians also have versions more nearly similar to the one here given.

All this time food had been easy to get, as Earth-Initiate had wished. The women set out baskets at night, and in the morning they found them full of food, all ready to eat, and lukewarm. One day Coyote came along. He asked the people how they lived, and they told him that all they had to do was to eat and sleep. Coyote replied, "That is no way to do: I can show you something better." Then he told them how he and Earth-Initiate had had a discussion before men had been made; how Earth-Initiate wanted everything easy, and that there should be no sickness or death, but how he had thought it would be better to have people work, get sick, and die. He said, "We'll have a burning." The people did not know what he meant: but Coyote said, "I'll show you. It is better to have a burning, for then the widows can be free." So he took all the baskets and things that the people had, hung them up on poles, made everything all ready. When all was prepared, Coyote said, "At this time you must always have games." So he fixed the moon during which these games were to be played.

Coyote told them to start the games with a foot-race, and every one got ready to run. Ku'ksū did not come, however. He sat in his hut alone, and was sad, for he knew what was going to occur. Just at this moment Rattlesnake came to Ku'ksū, and said, "What shall we do now? Everything is spoiled!" Ku'ksū did not answer, so Rattlesnake said, "Well, I'll do what I think is best." Then he went out and along the course that the racers were to go over, and hid himself, leaving his head just sticking out of a hole. By this time all the racers had started, and among them Coyote's son.

He was Coyote's only child, and was very quick. He soon began to outstrip all the runners, and was in the lead. As he passed the spot where Rattlesnake had hidden himself, however, Rattlesnake raised his head and bit the boy in the ankle. In a minute the boy was dead.

Coyote was dancing about the home-stake. He was very happy, and was shouting at his son and praising him. When Rattlesnake bit the boy, and he fell dead, every one laughed at Coyote, and said, "Your son has fallen down, and is so ashamed that he does not dare to get up." Coyote said, "No, that is not it. He is dead." This was the first death. The people, however, did not understand, and picked the boy up, and brought him to Coyote. Then Coyote began to cry, and every one did the same. These were the first tears. Then Coyote took his son's body and carried it to the lake of which Earth-Initiate had told them, and threw the body in. But there was no noise, and nothing happened, and the body drifted about for four days on the surface, like a log. On the fifth day Coyote took four sacks of beads and brought them to Ku'ksū, begging him to restore his son to life. Ku'ksū did not answer. For five days Coyote begged, then Ku'ksū came out of his house, bringing all his beads and bear-skins, and calling to all the people to come and watch him. He laid the body on a bear-skin, dressed it, and wrapped it up carefully. Then he dug a grave, put the body into it, and covered it up. Then he told the people, "From now on, this is what you must do. This is the way you must do till the world shall be made over."

About a year after this, in the spring, all was changed. Up to this time everybody spoke the same language. The people were having a burning, everything was ready for the next day, when in the night everybody suddenly began to speak a different language. Each man and his wife, however, spoke the same. Earth-Initiate had come in the night to Ku'ksū, and had told him about it all, and given him instructions for the next day. So, when morning came, Ku'ksū called all the people together, for he was able to speak all the languages. He told them each the names of the different animals, etc., in their languages, taught them how to cook and to hunt, gave them all their laws, and set the time for all their dances and festivals. Then he called each tribe by name, and sent them off in different directions, telling them where they were to live. He sent the warriors to the north, the singers to the west, the flute-players to the east, and the dancers to the south. So all the people went away, and left Ku'ksū and his wife alone at Ta'doikö. By and by his wife went away, leaving in the night, and going first to Marysville Buttes. Ku'ksū staid a little while longer, and then he also left. He too went to the Buttes, went into the spirit house (Ku'kinim Kumi), and sat down on the south side. He found Coyote's son there, sitting on the north side. The door was on the west. Coyote had been trying to find out where Ku'ksū had gone, and where his own son had gone, and at last found the tracks, and followed them to the spirit house. Here he saw Ku'ksū and his son, the latter eating spirit food (Ku'kinim pĕ). Coyote wanted to go in, but Ku'ksū said, "No, wait there. You have just what you wanted, it is your own fault. Every man will now have all kinds of troubles and accidents, will have to work to get his food, and will die and be buried. This must go on till the time is out, and Earth-Initiate comes again, and everything will be made over. You must go home, and tell all the people that you have seen your son, that he is not dead." Coyote said he would go, but that he was hungry, and wanted some of the food. Ku'ksū replied, "You cannot eat that. Only ghosts may eat that food." Then Coyote went away and told all the people, "I saw my son and Ku'ksū, and he told me to kill myself." So he climbed up to the top of a tall tree, jumped off, and was killed. Then he went to the spirit house, thinking he could now have some of the food; but there was no one there, nothing at all, and so he went out, and walked away to the west, and was never seen again. Ku'ksū and Coyote's son, however, had gone up above.

2. *The Earth-Namer* (Kō'doyanpĕ).[1]

Coyote and the Earth-Namer lived on the north fork of the Feather River, just below Na'kangkoyo. Coyote had a son. Earth-Namer said to Coyote, "I am going away from here. I am going off to the east." Coyote replied, "All right. We are two chiefs, we are the two greatest chiefs, and therefore you must talk to me well before you go." Earth-Namer said, "Well, I will talk to you before I go. This world is going to be for people. There are going to be people in this world. We are the two chiefs. I will talk to you, and you must sit down and listen. After me in this world, people will have children. When a couple get married, people will take something and put it between them if they want a child, and that thing will become a person." Coyote shook his head and said, "No, you are not talking right. I'll tell you something better. The way people must have children is for the woman to have a hard time. She must have a hard time to have a child, she must suffer." Earth-Namer did not want people to have sexual connection with one another; but Coyote said, "When two people get married, they must have connection; it must be so." Earth-Namer said that girls would live as virgins always, but Coyote would not agree. He said, "No, girls, if they are not married, must sometimes have children." By and by Earth-Namer said, "When people who have died are taken to water, laid in, and left there over night, they will come to life again next morning." Coyote said, "No, when people die, the rest of the people must cry. A widow must cry very much; and if a person dies, he must be buried. When they are buried, it will be all right, for the other people will see nothing of them." So Coyote disputed everything that Earth-Namer said. Finally Earth-Namer got angry, gathered up his things, put them in a sack, and started off. There was a trail from the camp to the place where they used to go for water. Earth-Namer pulled up two rushes, and stuck them into the ground, one on each side of the trail, so as to lean over the trail. Till now Coyote's son had never been allowed to go for water, had never been allowed to leave the house. When Earth-Namer had fixed the rushes in this way, he went on toward the east.

---

[1] Told at Genesee, Plumas County.

Soon Coyote sent his son out to get some water. Before he got to the place where the two rushes were, they had become rattlesnakes, and as he passed, they bit him in the leg and killed him. Earth-Namer wanted to have it happen this way, for Coyote had wanted people to die. When Coyote found that his son was dead, he ran after Earth-Namer, saying, "Well, we will have it your way, people shall not die." When he got nearly up to Earth-Namer, he said, "Look back! You are the chief; if you will stop, I will talk better than I did before." But Earth-Namer paid no attention to him, and kept on his way. So from that time there have always been rattlesnakes and people have died.

There is a place called Tsū′tsūyem. It is on Indian Creek. The women who lived there tried to kill people who passed by urinating on them. When Earth-Namer came along, he went on the opposite side. The women tried to urinate across, but could not reach him. He had a cane in his hand, and walked along, paying no attention to the women. A little beyond there, Mink and his brother were living, and Earth-Namer staid with them over night. Near by was a great snake that tried to kill everybody. Mink and his brother asked Earth-Namer to try and trap the snake. He did so, and in the morning went on again. Before he went he said, "Go to the trap and see if the snake is dead. If it is, take the fat, take it to Tsū′tsūyem, and at night, when all are in the sweat-house, crawl up and throw it into the fire." When the snake got into the trap, it jumped high in the air; but the Minks jumped after it, and cut it in two, taking half of it. In the snake was some sort of milky fluid, which fell out as they cut it in two. As the Minks looked up, some fell on them, and left a white spot under their chins. They took the fat, and did as Earth-Namer had told them to. The women and people at Tsū′tsūyem were having a great sweat-dance; and when the Minks threw in the fat, everything began to blaze up, and all the people and the sweat-house were burned. There is a great hole in the ground there to-day. Earth-Namer went on from here farther up the stream, and into Big Meadows to Ō′ngketi. Here he found Crow and his brother. They said, "The reason why we never kill anything is because our knives are dull." Then they asked Earth-Namer to sharpen their knives, which were their bills. He did as they asked, and went on up river to where Fish-Hawk was fishing. He caught a fish, and held it up, saying, "If you come from below, eat this." Then he swallowed it himself. When he had done this, Earth-Namer said, "I wish you would choke and die;" and he did.

Earth-Namer went on, travelled and travelled till he came to The-Two-Raft-striking-Boys (Ya′kwĕktelköm pö′betso). They had a dog, Ground-Hog. Ground-Hog saw Earth-Namer coming, and began to yelp. Just as he did so, Earth-Namer sank down into the earth, and went along underground. When he got within a few feet of Ground-Hog, he put up his head, and saw that the animal was still watching the place where he had gone down. The two boys got out their knives, and said, "These are what we kill people with." Then Earth-Namer reached over and killed Ground-Hog. He stuck him in his belt, and went on to the camp of the two boys. They hid their knives. They had a raft on which they took people across the river, and thus they tried to kill them. They would bring the raft within a few feet of the shore, make the people jump, and then would kill them. Earth-Namer asked them if they would take him across the river. They agreed, and did as usual, asking him to jump on. He did so, but landed in the middle of the raft, and did not fall down. The two boys were about to stab him; but when they saw that he did not fall, they waited.

Earth-Namer said, "Why are you making a motion? Let me see your knife." So they gave it to him; and he said, "I will point with this knife and show you the country, so that you can learn something." So he took the knife, and, while making believe point out different things, he cut off their heads. The two boys had a sort of oven in which they used to bake people when they had killed them. Earth-Namer put the bodies into the oven, but first cut off their membrum virile. There was an old woman who was living there also. She was the grandmother of the two boys. Earth-Namer thought that after a while she would miss the boys, and would run up to see what the trouble was. So he placed a membrum virile on each side of the oven for a trap. Then he went on to where the old woman was. He still had Ground-Hog under his belt; and when he reached the camp, he threw it at the old woman, and told her to eat it. Then she knew at once that something had happened to the boys. She threw it back at him, and told him to eat it. Earth-Namer then lay down, and pretended to go to sleep; but he really went on, and left only an appearance of himself in the camp. When the old woman thought he was asleep, she pulled out her digging-stick and struck at the shade. When she found that there was nothing there, she said, "That is what I thought, all the time, you would try to do." Then she was sure there was something wrong, and she ran down to the place where Earth-Namer had set the trap for her. When she got there, the trap sprung, flew up and hit her, and killed her.

Earth-Namer went on farther up the valley, to the place where his grandmother lived. She was called Old-Grouse-Woman (Ho'kwongkülŏkbĕ). There he rested awhile. From here he went on up through Mountain Meadows to the east. In one place he sat down to eat pa'pani (a kind of root). He sat facing the east, and he scattered pa'pani all about, and people go there still to gather it. His footprints are there yet. As he went on to the east, a she Grisly Bear chased him, but could not catch him. So she took off her apron, or skirt, and whirled it about her head, and thus started fire, with which to surround Earth-Namer. He asked the water what it could do to help him, and the water answered, "I boil from the heat of the fire." He asked the trees, and they replied, "We burn in the fire." He asked the rock, and it answered, "I get red-hot in the fire." Then he asked a kind of grass, and it answered, "I get black on top, but I don't burn. Beneath I am not burned." So Earth-Namer crawled under it.

After the fire had burned over the whole country, Earth-Namer came out and went on. On the mountains at that place one can see the burned rocks and trees caused by that fire. So Earth-Namer went on; and the bear, finding his track, kept on following him. Earth-Namer went off to the east; and when he got there, he staid there; he is there yet.

When people first came to this country, they had with them an old woman. She knew everything, all the past was known to her. She told the people to behave themselves and be good, for the world was going to change. After a while the world began to shake, kept on shaking, kept rising higher and higher. As the world shook, the people were thrown about. Some were thrown into bushes, some into trees. The shaking threw the trees down; they were covered up, and are found now buried deep in the ground. The shaking of this world made it settle; and as it settled, it forced the water up through the ground. As a result of these things the world was made into its present form. This old woman had an acorn-pestle, which she had used to pound acorns with; and when the world was shaking, she held tight to it. All the time she kept hammering with it on the ground, to try to wedge or fasten it down. By and by the world began to settle, and people could hear something like thunder under the ground. When all was quiet, people looked down into the valley, and saw something moving. These things were rivers, they were the first rivers. After awhile the people went down to look at the valley, and found the rivers all muddy. By and by the old woman said, "They put me in this world to see all these things for my children. I will tell all my people in this world before I go. I think there will be death in this world; I think this will be a death-world. You people must do the best you can, and live through it. A long time ago they told me that people would have to live in the middle of the world." The old woman knew everything about the past and the future. She somehow lived over from the time when there were no people, and was the only old woman among the people when they were first made. She said, "One of the men here will be a shaman (yō′mi). He will hear everything in these mountains. He will hear all the spirits (ku′kini). Whenever he sings, the spirits will talk to you and tell you whether a person will live or die. The spirits will teach you everything. Whenever they want any one to become a shaman, they will tell him. Whatever the spirits say, you must believe, and must do as they say, then you will become shamans. In that way you people must live here in this world, and do the best you can. Live as long as you can. If you die and leave children, they must do the same. You people will live a long time in this way in this world."

3. The Conqueror.[1]

There were two old men who were brothers. Their names were Wa′pamdakpam and Kīū′madessim. They lived at Tsū′pionon in a large sweat-house. They had many children who lived with them. The people used to go from here to the southwest to hunt geese, and killed many. They had a place where they stopped to cook and eat before they went home. The two old men went with them to the hunt. They told the people always, "Hurry up and cook your food, and eat it and go home. Something may come after us." Bald-Eagle (Mo′loko?), who lived far up in the sky, would come and kill the people. Just below the sweat-house was a bluff, and now and then people would hear Ground-Squirrel there barking. When they heard him, some would go to try to kill him; and if they went, they never came back again. When they went down to the bluff and shot the squirrel, they would see the squirrel drop, and would go to pick him up. When they got to the place, they would find nothing; and when they began to come back, they would be surrounded by rattlesnakes, and would be killed by them. There was another sweat-house near by, just below the one where the two old men and their people lived. This belonged to Wood-Bug. He would get up a sweat-dance sometimes, and many of his people would come to it. The people at Tsū′pionon would hear the noise, and would say, "Let us go and see what they are doing down there. Let us go and have a dance." Then two or three would go. When they got there, Wood-Bug would say, "Come in." Then they would begin to dance, would dance all about the sweat-house. The people there would knock against the visitors as they danced, knock them about, and kill them. There was another place off to the east where an old woman lived. She was called Man-straightening-Old-Woman (Ma′idükapitkün külo′kbĕ). People from Tsū′pionon, in hunting or walking about, would sometimes come to her house. They would talk to her; and she would look at them and say, "What a fine-looking man you are! only you are not straight. If your back were straight, you would look better. Your mother ought to have straightened you when you were born." She had something in her hand, which she said she used to straighten people. She would say, "Let me take this and straighten you out, — straighten your arms, legs, and body, — and then when I get you done, you will be a straight man." She had a sort of couch or bed of stone which she had ready for this purpose. She would get the man to lie on this on his face, and then she would rub him with what she had in her hand. Back of her, however, she kept a great stone pestle; and while she was rubbing the man, she would reach around with one hand and take this pestle, hit him in the small of the back with it, and kill him. Sometimes people would see, when they went north from the sweat-house, an elk's track. They would follow it, two or three of them, follow it and follow it, and would die before they got to the elk.

---

[1] Told at Genesee, Plumas County. Compare pp. 59 et seq; also Powers, *l. c.*, pp. 294 et seq.

One day many people went goose-hunting. They stopped to cook and eat. The old men advised them to hurry, but before they could get away, they heard something far up in the sky: it was Bald-Eagle coming. They could hear the whirr of his wings as he swooped down on them. As he came, Eagle sang, "Ye from Tsū′pionon, though ye wish to hit me, ye cannot" ("Bō′yēnkatitmak bō′men mam tsū′pionona"). When Eagle was about halfway down, some one threw a stone at him with a sling; but as he came down, he came zigzagging from side to side, and the man missed him. Every one tried to hit Eagle, but missed him. Then the two old men tried. Wa′pamdakpam threw, and just grazed Eagle, knocking off a few feathers. Then Kīū′madessim threw, and did the same. By this time Eagle had gotten nearly down; and when he reached the ground, he killed all the people except the two old men. They had knocked off some of his feathers, and he could not kill them. So the two old men came home alone, and all their people were gone except a few that had staid at home.

After this, all the people left Tsū′pionon, and went to the southwest, to Hela′iono, to gamble. They travelled on and on, and came to a river, where all sat down to rest. They were going to swim the river, and looked across and saw women on the other side, pounding acorns, making soup, and cooking bread. In the middle of the river was a plant that stuck up out of the water. When people came to this river, they chose the best swimmer, who had to swim across above the plant. If he did not get across, he died. This was a way there was at that time of gambling for people. All the people from Tsū′pionon started and swam across. The two old men and most of the others got safely across, but some were drowned. There was a sweat-house on the other side. All the people went to it. The entrance, which sloped down steeply, and the whole floor, were of smooth ice. People would slip on this floor, fall, and slide about till they got killed. Many of the people slipped, fell, and were killed; but the two old men and a few others were left. By and by the people who lived at this place brought in a big basket of soup. If a person could drink it all up, he got off safely; if he could not do this, he died. All the people except the two old men were killed in this way; and they, when they escaped, came back to Tsū′pionon.

The two old men had one daughter, who had not gone with the people when they went to Hela′iono. She had staid at home, and was the only one left, besides the two old men. When they told her about losing all their people, she began to cry, and went out to gather clover. All the time she was gathering it, she was crying. Every day she went out this way to gather clover, and every day she cried all the while. One day a man came to meet her as she was picking clover in the valley. He said, "What are you crying about? You must stop. If you will marry me, I will give you two children. I think we are married anyhow, so it is all right. I live far up in the sky. I am Cloud-Man." He talked to her for a while, and gave her two bunches of black feathers. He said, "These will be children. One will be Always-eating (Pe′msautō); the other will be Conqueror or Winner (O′nkoitō). Put these things away where the two old men will not see them. No matter how much food you cook, or what kind, or where you set it down, Always-eating will eat it. He will eat for both boys." He gave her two scratching-sticks for the boys to use, and said, "When you start these two boys out, they will travel all over the world, find all the monsters that kill people, and will destroy them. They will overcome everybody." She took the two bunches of feathers, and put them away safely in a basket in the house. She kept cooking food for the two boys, kept busy all the time, and every day all that she cooked disappeared. By and by the two old men suspected something. One said, "What is the trouble? There must be something the matter. Our daughter is always cooking food, but it goes, it is not there next day." They began to look about the house, and saw one of the two scratching-sticks sticking in a crack of the wall. They thought it belonged to one of their people that they had lost, and said, "Let us throw this into the fire and burn it up. It must be one of the scratching-sticks of our children who were lost." So one took it and threw it into the fire. The stick began to burn, it popped and snapped, and a great many sparks flew out. As soon as this happened, the two boys jumped out of the basket in which they had been, and ran out of the house. When the two old men saw the boys run out, they looked at the stick, and saw that it was still unburned: so they seized it, and took it out of the fire. As soon as the boys went outside, they grew to be men. The two old men said to each other, "Where did these two boys come from?

We never saw them before. How could they be here and we not see them?" The mother was off pounding acorns, but she saw the boys run out, and came hurrying up to see what was the trouble. She said to the two old men, "Can't you be sensible? When you see something in the house which you don't understand, why don't you let it alone?" Then she took a stick and hit the old men, and knocked them down.

Soon after the two boys came out, the Squirrel at the bluff began to bark, crying "Tī′tsŭk, tī′tsŭk, tī′tsŭk!" and trying to call them. Conqueror went into the house, and restored his grandfathers to life. Then he said, "Give me your bow and arrows. I want to go and kill that Squirrel." The old men said, "No, that is a bad place. That is where all our children were killed, where so many of our people were killed. Let Squirrel alone, let him bark." Conqueror said, "Hurry up! Give me the bow and arrows: I want to try, anyhow." After a while the old men gave him the bow and arrows. Conqueror stood right in the doorway, did not go near Squirrel, but shot and killed him from the door. Then he put on his stone shoes, and went to where Squirrel was. All about he could see the bones of those that had been killed there. Then the rattlesnakes began to come out, surrounded him, and began to strike at him; but he stamped on them with his stone shoes, and killed them all. Then he pulled up the rocks, and pulled out all the snakes that were under them, stamped on them, and killed them. Then he said, "You shall be rattlesnakes. You must not kill everybody any more. You shall live as rattlesnakes." Then he took Squirrel and carried him back to camp, and threw him down where the two grandfathers were. As soon as they saw him, they jumped up and began to sing and shout and dance, they were so glad to have Squirrel and the snakes killed. They said, "You were the one who killed all my people." Then they took him and tore him to pieces, and stamped on him and danced on him, ground him up till there was nothing left of him. When night came, Conqueror was standing outside, and heard a sound as of people dancing. It was the Wood-Bug people, who were dancing at their camp. Conqueror put on his shirt of red-hot rock, and went to the place whence the sound came. He went into the house and began to dance with them. They tried to do as they had always done before, and knocked him about; but Conqueror did the same, and knocked them about, knocked against people, knocked them this way and that, burned them with his red-hot stone shirt, and killed them all. Then he said, "You shall say that you are only wood-bugs. You will be wood-bugs; you cannot harm people any more."

The next morning he went to the place where Man-straightening-Old-Woman lived. She saw him, and talked to him as she always did to people she wanted to kill. She asked him to let her straighten him, and he agreed. Conqueror lay down on the stone, and the old woman began to rub him. She reached back for her big stone, and struck at him with it; but Conqueror dodged, and she missed. She hit the rock on which people were laid out, and broke her pounding-rock in this way, and a piece flew off and killed her. Then Conqueror went away and said, "You will never kill any more people. You will be nothing after this." When he got home, he went north, and saw an elk-track. It was fresh. Elk had passed but a short time before, and so he followed it. He travelled and travelled all round the world after Elk. Then Elk made a straight cut across the middle of the world, and Conqueror nearly caught up with him. He thought he had him surely, but all at once he lost the trail. He looked for it, kept looking for it everywhere, kept hunting, searched all around, but could not find it. After a while he heard a little bird call to him from above, saying, "Look up here, look up here!" Elk had jumped up, meaning to jump over the sky and get away; but just as he was going over, Cloud-Man stopped him. So Conqueror saw Elk's legs hanging down where his father, Cloud-Man, had stopped him. Cloud-Man was always watching his son from above. Cloud-Man killed Elk; and Conqueror said, "Whenever people find you, they will kill you for meat. You will be an elk."

From here he turned round and came back to the place where his mother and grandfathers lived. He travelled and travelled, and finally reached it. He said that night, "Grandfather, I want some meat in the morning. I want to kill geese and ducks. Do you know where I can find them?" When morning came, Conqueror and his brother and the two old men started out and went west. They killed many ducks and geese, and went to the place where they used formerly to eat something before they came home. They built a fire, cooked the geese, and began to eat. Then they heard, far up in the sky, Bald-Eagle coming. They watched, and pretty soon they saw him. Conqueror said, "You two old men throw first. I want to see how you used to do when you saved yourselves." So one of the old men threw, and just knocked off a feather. He said, "That is what I do to save myself." Then the other old man did the same, and said, " That is what I do to save myself." Then Always-eating threw. He hit Eagle, took off some feathers, and some skin too, did better than the two old men. Eagle was singing, as he always did, "Ye from Tsū′pionon, though ye wish to hit me, ye cannot!" Then Conqueror threw, and hit Eagle, destroyed him all but the wings, that fell down. All the rest was knocked to pieces. Then Conqueror said, "After this you will be a bird. You will live up in the Heaven-Valley. People will never see you any more." Then they went back home, and found Conqueror's mother cooking, for Always-eating ate a great deal.

Conqueror said to his grandfathers, "Did you ever go anywhere to gamble? If you did, let us go and gamble." They said, "We used to gamble at Hela′iono. That is where we lost all our people." Next morning they started. They travelled and travelled, and finally reached the river. The old men said, "We used to start from here, swim by that plant, and managed to get out. That is the way we got along." Conqueror said, "Let us try it, one at a time. You go first, for I want to see how you do it." So they swam one after the other. Nobody ever could swim up to the plant, they were carried down below it; but Always-eating swam close to it, beat every one that had tried before. Then Conqueror went, and swam up to the plant, pulled it up, and carried it with him to the other side. At this time the people began to carry the soup into the sweat-house to have it ready for the visitors. Conqueror sent the two old men in first. They had canes in their hands, but slipped, floundered about nevertheless, yet did not fall. Conqueror went in, wore his stone shoes, crushed the floor as he stepped on it, broke it all to pieces, kicked it all up, kicked it outside. He said, "Why do you have an ice floor in the house where people live?" Always-eating sat down by the soup, drank and drank and drank, till he drank it all up. Then he took the basket and threw it outside. Then they began to gamble. The two old men were to begin. The other side won, and came over, and took an eye from each of the old men. This was the way people used to do. They played again, and the two old men won their eyes back. Then the people filled the basket up again with soup, and gave it to the old men and the others. Always-eating had a piece of flint with which he cut a hole in the bottom of the basket and let the soup run out, so that it looked as if he were eating it all. When the women outside found that the soup had been finished a second time, they began to cry. After a while Conqueror moved up, and entered the game. The person with whom he was gambling had a path through his body, and could pass the gambling-bones through this from one hand to the other. Conqueror stopped up this passage in his adversary's body without his knowing it, and opened one in his own body. Now he began to win. While he was playing, Conqueror sang the song that North-Wind sings, and in this way called North-Wind to him. Conqueror was going to freeze up everything. Conqueror kept on winning, beat them all, killed most of the people who were playing against him. Then North-Wind came and froze up everything. Conqueror had killed all the people except two women. By and by these started in to gamble, as there was no one else left. They kept on playing; and when they were almost beaten, they jumped up and went over to their opponents' side. They did this, as they thought they might save their lives by marrying Conqueror and Always-eating; but it was not so, and they were killed.

As Conqueror and his brother and the two old men were leaving to go home, Conqueror said, "People will talk about this, and tell of how we gambled here." Then they started. They travelled and travelled, finally reached home. They lived there always.

4. Kū'tsem yĕ'poni.[1]

An old woman and an old man were living alone by themselves. The old woman put a bead in a basket and set it away in the house. She told the old man not to build a fire, and then went off to bake some acorn-bread by the creek. While she was away the old man forgot, and built a fire. The earth began to shake, and he ran out of the house. When he looked back, he saw a boy standing by the fire. His name was Kū'tsem yĕ'poni. By and by the boy grew to be a young man. He was always playing with toy bows and arrows. One day he told his grandmother that he wanted a bow and arrows such as the men carried. So to please him his grandmother made him one. This boy had two eyes behind, under his shoulder-blades. One day he saw what he thought was a gopher with its head sticking up out of the ground. He told his grandmother that he wanted a spear to kill the gopher with. She said, "You will always be in trouble as long as you are here." He took the spear that she gave him, and jabbed it into the gopher; but it turned out not to be a gopher at all, but a bear; nevertheless he killed it.

He told his grandmother that she could have all the food she wanted. "I'll kill plenty," he said. Then he heard the sound of a dance going on far away to the southward, and he wanted to go and see what it was. He said to his grandmother, "There must be some one living there. I hear dancing. I want to go and see it." She answered, "It will only make trouble for you if you do." But he went. He went toward the place whence he heard the sound of the dancing, and, going into the dance-house, he found it full of poisonous insects, that were making all the noise. They began to jump on him till he was covered with them, like meat with flies, and they tried to overpower him. He would scrape them off his arms and legs, roll them into a ball, throw them into the fire, and burn them up. Some of them escaped, however, and those that we have to-day are descended from them.

---

[1] Told at Chico. Compare pp. 51 et seq. I am unable to give any meaning for this name.

When he came home, he told his grandmother all about it. While he was inside telling her, a lot of woodpeckers were outside sitting on a dry limb and making a great noise. He told his grandmother that he wanted to go and shoot them. She said, "If you miss one, you will surely die"; but he went out and shot them while they were all in a row, and killed them all. When he took them to his grandmother, she burned them, as she did everything that he brought her. Then Great-Deer came along dressed as for a dance. He had feathers on his antlers, and his eyes shone like the morning star. He was called Lift-up, Chasing-up, and Running-Deer[1] (Wī′sdom-sümi and Hēi′nom-sümi and Yō′dom-sümi). He came from the north. The young man told his grandmother that he had seen a deer and wanted to go and kill it. She begged him not to do so. But he went. He shot and hit it. He had two arrows winged with yellow-hammer feathers. He shot one and kept the other. The deer ran north, and the young man ran after it on foot. For a long time he followed, but finally the deer gave out. All the time that the young man was chasing the deer, he never saw it: he knew which way the deer had gone by means of his arrow. When he slept at night, he would stick the second arrow, with the yellow-hammer feathers, into the ground beside him, and this arrow and the one in the deer called to each other just as yellow-hammers do. When it was dark, the young man heard something (spirits) singing far up in the sky; they were singing to help him. Finally the deer came to the end of its running, and the young man had to scout for it. He saw where it had slipped on a rock; but then he lost the trail, and could find no further tracks. After looking around for a long time in vain, he picked up a handful of dust, and asked it if it knew which way the deer had gone. The dust answered, "You need not ask me: I'm not a god's son! You are, and you ought to know. Look up, you will see its hind-legs sticking down from the sky." The young man did so, and there the legs were as plain as could be. He knew where the deer was now, but he did not know how to get up to it. By and by he called the clouds, and they came and made a rainbow for him, and he went up on that. When he reached the top, he cut the throat of the deer, and threw the body down to the earth below, but he took off all the deer's feathers first, and cut off its head, and carried these down himself.

---

[1] Elk.

The food that the young man lived on was a sort of berry called moi′moimō: it was like a gooseberry. On the road he met a man who was hunting. He asked the man where he came from, and he answered, "Ta′doikō." Then he asked him what he was doing in this country, and the stranger answered, "I am hunting." The stranger was a good-looking fellow, and at first the young man did not know who he was. The stranger asked if he had anything to eat, as he was very hungry, since he had not been able to kill anything. The young man said that he had, and gave the stranger some of the berries. He ate them, two handfuls, and they were so good that he thought that he would like some more. So he transformed himself, ran ahead, and in the guise of an old man met the young man a second time. He told the same story as before, and as before got two handfuls of berries. He ate these, and tried the same trick again; this time meeting the young man in the form of an old woman, who said she was looking for the old man, who was her husband. Again the young man gave the berries. Hurriedly eating these, the stranger went on again, and for the fourth time met the young man, this time as a beautiful girl, who was looking for her father and mother. The young man gave her two handfuls of berries, but began to wonder why he met so many hungry people. He made up his mind to play a trick on the next person he met. He took some of the berries, mashed them, and made a ball of them. Then he went to a yellow-jacket's nest, and put some of them into the ball of berries. Soon he met the stranger again, this time as a young man. He told the same story, and, the berries being handed to him, he at once began to eat them. Soon the wasps began to sting him inside, and he began to scream and kick.[1] The young man then went back, and found that it was Coyote who had been asking him for the berries all the time. He never said a word, but went away and left him lying there.

When he reached his home, he went to his grandmother and told her all that he had done. There was an old man who lived with his grandmother: he was called Raccoon (Hū′mili). The young man said to him, "Let's go and have some fun! Let's go where there are some people living!" Raccoon said, "I don't know where we can go unless we go north, but I don't think you can stand it to go there." The young man said, "Why can't I stand it?" Then Raccoon said, "There are too many dangers on the way, and at the place where we are going"; but the young man persuaded him, and they agreed to go. They took four sacks of beads, as they were going to gamble.

They went a long way, and came to a river. Said Raccoon, "Sometimes I get no farther than here." The young man said, "You swim across first, and I'll follow you." So the old man did so. When he was about halfway or more across, he looked back, and saw his grandson near the middle of the river. He could not tell what the young man was trying to do. The latter dived, went along under the water, and came to Marysville Buttes. He went there to get some gambling-medicine. The grandfather swam on across the river, got out, and stood looking for his grandson. He began to worry. He waited till he was tired; then he made a large fire and jumped into it, and was all burned up but one foot. When the young man got back from his excursion to the Buttes, he saw no one anywhere about. He called for his grandfather, but there was no answer. He looked for tracks, and came upon the pile of ashes: here he saw traces of the old man. Then he saw the foot. He said to himself, "The old man thought I was dead, so he burned himself up." Then he took his own right foot, put it on the old man's foot, and said,

---

[1] See F. Boas, Traditions of the Tillamook Indians (Journal of American Folk-Lore, Vol. XI, p. 141).

"Get up!" and up jumped the old man. He said as he rubbed his eyes, "I was just taking a nap. I must have overslept." Then the two went on, as before, toward the north.

They came to the place where they were to gamble. They were to gamble with Old-North-Wind, Bö′dawinkano. The young man said to his grandfather just before they arrived at the village, "When you go into the house, walk slowly." The old man said, "I am older than you; I guess I know what to do. I have been here often. I can walk right in." They went up to the door. The young man went ahead. His toe-nails were like eagles' claws. The floor slanted down from the door-sill, and on the floor were the hides of blue-snakes: they were very slippery. When he got inside, he called to the old man to come in, but to be very careful. The old man came in in a hurry, slipped, fell, came rolling and sliding head-first into the room; and, hitting a drum that stood at the east side of the fire, he dashed out his brains. The young man, however, paid no attention to him.

Old-North-Wind set out soup for the young man to eat. He ate all that he wanted, and then said, "Here are four sacks of beads. I have come to gamble with you." Old-North-Wind answered, "We don't play for beads here, we play for eyes and hearts only." The young man did not know whether he would play that way or not, but finally said he would. They began. The first time, the young man lost his grandfather's eyes and heart. When he found that he was getting beaten, he told Old-North-Wind that he had to go out to relieve himself, he had eaten so much soup. When he got outside, he picked up a handful of dust and poured it on a rock. Then he asked it why he couldn't win. The dust answered, "I am not a god's son. You are, and you ought to know." The young man could not get any answer from the dust, but the latter finally told him to ask the Sun. He did so. The Sun said, "I'll tell you what is the trouble. Old-North-Wind has a hole under his armpits, from one side of his body to the other. Through this hole he can pass the bones when he gambles: in this way he cheats you. When you go in again, call for a fog: I will then shine so hard that the fog will be like glass under his arms, and then the bones will not go through. They will bounce off, and then you can catch him." The young man entered the house again. He had already lost one of his eyes. He did, however, as the Sun had advised; and when Old-North-Wind tried to shift the bones, he caught him. From that moment he began to win back all that he had lost. He won the eyes and heart of his grandfather, and his grandfather at once jumped up and began to help him. He won back his own eye. The old man and his grandson both played, and beat every one there. They won all their eyes and hearts. Old-North-Wind wanted to stop after he had lost one eye. So they did.

Soon it began to cloud up and rain, and the grandfather and the youth started for home, and carried all the eyes and hearts with them. When they got back, the grandmother said, "I knew you had won as soon as I saw it rain." He staid at home for ten days. Then he heard a noise off to the south, at Wō′nōma. The old woman that lived there made the noise. The young man asked his grandmother, "Where is that war? I hear some one giving a war-whoop." She replied, "That is only for you, you are not done with yet." He said, "I am going to see what the noise is, anyway." He took his bow and arrows and went. When he got there, he found an old woman sitting on a rock. He asked her where the war was. He put his foot on the rock near by, which was on the north side of the knoll, and his footprint is there to this day. The old woman said to him, "I am your great-grandmother, and was just wishing to see you. You are a fine big young man. Lie down on this rock and let me straighten the bones of your back." He did so, and she rubbed his back with one hand, while with the other she drew towards her a huge rock with which she meant to strike him. She raised it to strike; but with the eyes in his back he saw what she was going to do, and dodged the blow, so that she struck the rock instead. She began to abuse him. "You are the first one I ever missed. There are all your brothers over there." Then the young man said to her, "Do you lie down, and let me straighten your back." She did not want to, but did not dare to refuse. He rubbed her back, and then struck her with the great stone and cut her in two. He took her heart and brought it home. His grandmother said to him, "You are the only grandson I have had who could do all these things without getting hurt." The young man staid at home another ten days. Then his grandmother and grandfather fell ill, and both died the same day. The young man buried them, and then he went away, and no one knows where he went.

5. The Search for Fire.[1]

At one time the people had found fire, and were going to use it; but Thunder (Wö'tömtömim maidüm) wanted to take it away from them, as he desired to be the only one who should have fire. He thought that if he could do this, he would be able to kill all the people. After a time he succeeded, and carried the fire home with him, far to the south. He put Wo'swosim (a small bird) to guard the fire, and see that no one should steal it. Thunder thought that people would die after he had stolen their fire, for they would not be able to cook their food; but the people managed to get along. They ate most of their food raw, and sometimes got To'yesköm (another small bird) to look for a long time at a piece of meat; and as he had a red eye, this after a long time would cook the meat almost as well as a fire. Only the chiefs had their food cooked in this way. All the people lived together in a big sweat-house. The house was as big as a mountain. Among the people was Lizard (Pī'tsaka) and his brother; and they were always the first in the morning to go outside and sun themselves on the roof of the sweat-house. One morning as they lay there sunning themselves, they looked west, toward the Coast Range, and saw smoke. They called to all the other people, saying that they had seen smoke far away to the west. The people, however, would not believe them; and Coyote came out, and threw a lot of dirt and dust over the two. One of the other people did not like this. He said to Coyote, "Why do you trouble people? Why don't you let others alone? Why don't you behave? You are always the first to start a quarrel. You always want to kill people without any reason." Then the other people felt sorry. They asked the two Lizards about what they had seen, and asked them to point out the smoke. The Lizards did so, and all could see the thin column rising up far to the west. One person said, "How shall we get that fire back? How shall we get it away from Thunder? He is a bad man. I don't know whether we had better try to get it or not." Then the chief said, "The best one among you had better try to get it. Even if Thunder is a bad man, we must try to get the fire. When we get there, I don't know how we shall get in; but the one who is the best, who thinks he can get in, let him try." Mouse, Deer, Dog, and Coyote were the ones who were to try, but all the other people went too. They took a flute with them, for they meant to put the fire in it.

---

[1] Told at Genesee. Compare Curtin, *l. c.*, p. 365; Kroeber, *l. c.*, p. 252.

They travelled a long time, and finally reached the place where the fire was. They were within a little distance of Thunder's house, when they all stopped to see what they would do. Wo′swosim, who was supposed to guard the fire in the house, began to sing, "I am the man who never sleeps. I am the man who never sleeps." Thunder had paid him for his work in beads, and he wore them about his neck and around his waist. He sat on the top of the sweat-house, by the smoke-hole. After a while Mouse was sent up to try and see if he could get in. He crept up slowly till he got close to Wo′swosim, and then saw that his eyes were shut. He was asleep, in spite of the song that he sang. When Mouse saw that the watcher was asleep, he crawled to the opening and went in. Thunder had several daughters, and they were lying there asleep. Mouse stole up quietly, and untied the waist-string of each one's apron, so that should the alarm be given, and they jump up, these aprons or skirts would fall off, and they would have to stop to fix them. This done, Mouse took the flute, filled it with fire, then crept out, and rejoined the other people who were waiting outside. Some of the fire was taken out and put in Dog's ear, the remainder in the flute being given to the swiftest runner to carry. Deer, however, took a little, which he carried on the hock of his leg, where today there is a reddish spot. For a while all went well, but when they were about halfway back, Thunder woke up, suspected that something was wrong, and asked, "What is the matter with my fire?" Then he jumped up with a roar of thunder, and his daughters were thus awakened, and also jumped up; but their aprons fell off as they did so, and they had to sit down again to put them on. After they were all ready, they went out with Thunder to give chase. They carried with them a heavy wind and a great rain and a hailstorm, so that they might put out any fire the people had. Thunder and his daughters hurried along, and soon caught up with the fugitives, and were about to catch them, when Skunk shot at Thunder and killed him. Then Skunk called out, "After this you must never try to follow and kill people. You must stay up in the sky, and be the thunder. That is what you will be." The daughters of Thunder did not follow any farther; so the people went on safely, and got home with their fire, and people have had it ever since.

6. *Thunder and his Daughter.*[1]

Thunder (Wö′tömtömiwaisī′m) had a daughter (Wötömtömim möpom). She was very beautiful, and went about luring young men to destruction by inducing them to follow her. She lived far to the east. Two brothers were living in the middle of a valley. The two were sitting on the top of the house, singing. The older of the two was Pitmi′lussi, and he had arrows. Thunder's daughter came along, and Pitmi′lussi, seeing her, said, "I am going to follow her." The mother and father of the two brothers were inside, and, hearing what he had said, called out, "No, she is not good. Let her go." But Pitmi′lussi replied, "She looks like a beautiful girl; I am going to follow her." The parents tried to dissuade him, but failed, and he set out. He took one of his arrows, and shot it so that it fell ahead of the girl, and stuck in the ground. She had a pack-basket filled with ice on her back, and, picking up the arrow, put it into the basket and said, "I think I shall have an arrow to take to my brother." If any man shot an arrow in this way, and could not succeed in getting it out of the basket, he was sure to die. Pitmi'lussi, after shooting the arrow, hurried on, and caught up with the girl. He put his hand underneath the basket and pulled his arrow out, thus getting the best of the girl. Thunder was watching what had been going on, and as soon as Pitmi'lussi got the better of the daughter, it thundered; and Thunder called out, "Some one has the best of us" ("Mino'doko nikī'"). By and by the girl came to a large patch of wild roses: they grew very thickly, and had many thorns. She walked through them, however; and as she walked, the roses closed up behind her, and left no trace of a path. The young man, however, had with him a piece of flint, and, placing it on the ground, he said, "You must cut me a path." It did so, and, cutting from side to side, it cut a path for him, through which he walked, and followed the girl. So he got through, and again it thundered.

---

[1] Told at Genesee. Compare Curtin, *l. c.*, pp. 145 et seq.; Teit, *l. c.*, pp. 39 et seq.; Burns, *l. c.*, pp. 397 et seq.

Next the girl came to a place where there were a great number of rattlesnakes, and passed through them all safely. Pitmi'lussi, as he followed behind, put on his stone moccasins, which reached up to his waist. These stone moccasins were red-hot, and so he was able to walk through the snakes in safety. Then it thundered again. Pitmi'lussi then said to himself, "Hurry up and come, night: I wish to sleep with this woman" ("Kū'lūlelep kü'lekan ni'kī tū'yihakas"), and instantly it was night. Always before, the woman had been able to go through the day without the man who was following her being able to keep up. The girl made camp, and he staid with her for the night. While they were sitting there, she brought on a great storm, and Pitmi'lussi went off to get some wood. When he did so, his brother immediately was with him, and began to help him. The storm put out the fire, and made things very uncomfortable. Near the camp was a huge tree, and in it was a hole through which the woman could crawl. She crawled in, and put her basket, which was full of ice, over the opening. The two brothers were outside by the fire, talking. The younger brother said, "I'd better go in and sleep with her there." The older said, "No, that will be bad. I'd better go." To this the younger agreed. He seized the ice-basket, and, although it was so slippery that no one else could hold it, he pulled it out through the hole, and crept in. Deinde cum ea ludere incipiebat; cumque vaginam ejus dentibus crotali circumdatam sentiret,[1] silice arrepto omnes abscidit sustulitve. In the morning the girl had a child. Again it thundered.

She came out, and after eating proceeded on her way. She came soon to a great pond, or river, covered with ice so slippery that no one could stand on it. She passed over easily, however; and when Pitmi'lussi came, he again put on his stone moccasins, and with these walked over easily, melting the ice with the red-hot shoes. Then it thundered. Next the girl led him to a great river, very broad, but shallow near the edge. As he went farther in, it grew deeper and deeper. The water was up to his nose. Pitmi'lussi had a piece of feather of a duck (Wa'tkö). His spirits told him to stick this in his hair. He did so, and at once the feather began to call out, "At-at-at-at!" and the water at once began to go down and grow shallower, and thus he got across.[2]

Next the girl led him through the Valley of Old Age, in which people died of old age before they could pass through (Ne'nowōnokōngkoyō). He travelled and travelled, following the girl, till it seemed as if he never would get through. He began to grow gray, then white, became weak. Then his spirits said to him, "Stick that feather of the Atataim bird (si'lĕpam) in your hair." He did so. At once the duck-feather cried, "At-at-at-at!" and he became young again, and got to the other end of the valley. Beyond this Valley of Old Age was a great sweat-house which belonged to Thunder. It was all of solid ice, and lay far in the east. The girl was some ways ahead when she reached the sweat-house, and she walked easily up to the top, carrying the child, and entered through the smoke-hole. When Pitmi'lussi reached the house, he put on his stone moccasins, and, walking easily up, entered, and sat down beside his wife. Then it thundered again.

---

[1] Compare Boas, *l. c.*, pp. 24, 30, 66; Farrand, Chilcotin, p. 13.

[2] Another account has it that he made a raft of the feather.

Thunder then ordered the woman to give Pitmi'lussi something to eat. She did so, and he ate readily. It was poison, but it did not harm him. Then it thundered. It was nearly night, and Thunder said to his son-in-law, "There is a large pitch-log out there. You had better go out and get some for kindling for the morning." Pitmi'lussi went out, and found the log. It was very solid and hard, and he had no axe. Unless a man could break off a piece with his hands, he would die, and all about the log were the bones of those who had failed. Pitmi'lussi thought a while, then talked with his spirits, who told him what to do. He took the log up, and smashed it against the ground, thus breaking it to pieces. He gathered up an armful, and came in with it. Then it thundered.

In the morning Thunder told Pitmi'lussi to go down to the river and spear some fish; he told him where to go, and to watch, for there were several kinds of fish. If one came along wearing bead earrings, he was not to spear it; but if one came along wearing buckskin earrings, this was the one to spear. He went and waited. By and by the fish with buckskin earrings came along, and he speared it. The fish could not get loose, and Pitmi'lussi could not land it, and they had a great struggle, the fish gaining all the time, for Pitmi'lussi could not let go of the spear. The fish was pulling him under the water, when he called on his spirits. Immediately he saw some water-ousels (Tse'ktsakhö); and these, diving down under the fish, pushed it up toward the surface, and Pitmi'lussi began to get the best of it. Finally, with the help of the water-ousels, he got the fish ashore, and carried it to the house. Then it thundered.

The next morning Thunder sent his son-in-law out on a deer-hunt. He told him where to go. He went, and found no deer; but a huge grisly bear was there, and jumped out at him. He kept shooting at the grisly, but could not kill it. The bear came up very close to the man, so close that he could not get his arrows out of the quiver, so he turned and ran. The grisly bear time and again almost caught him, but always failed at the last moment. It chased Pitmi'lussi for half a day. They came at length to the top of a high mountain; and as Pitmi'lussi looked down to see where he was going to run to, he saw a huge tree (Tsū'militīm tsa) all made of ice, made for him by his spirits. It was swaying back and forth, back and forth, bending far down on this side, and then on that. As he went down the mountain toward the tree, he gained on the bear, and when he reached it he was a little ahead. As he reached it, the top came down to the ground at his feet in one of its swayings; he caught it, and was swung up by it high in the air, where the tree then remained stationary. The grisly came up, and tried to climb the tree, but could not, as it was all ice and very slippery. Finding he could not climb, the bear lay down at the foot of the tree to wait till the man should come down. The bear could not be killed unless he was hit in the left hind-foot,[1] but Pitmi'lussi did not know this. From the top of the tree he shot at the bear many times, and put many arrows in the bear's body, but without killing it or troubling it at all. He had shot all his arrows away but one. He kept this for some time, and talked to his spirits, who told him where to shoot in order to kill the bear. He could not, however, hit the bear's left hind-foot, as the bear was lying so that it was under it. So Pitmi'lussi began to talk to the gophers, and told them to work under the bear, and gently to shove out the foot that he wanted to hit. They did so, and he shot the bear and killed it. Then it thundered.

Then he came down from the tree, went back to the house, got his wife, and went home. If Pitmi'lussi had not overcome him, Thunder would have gone on killing people. Now Pitmi'lussi put an end to it. He won back all his people.

7. The Loon-Woman.[2]

A Loon (Kō'wōköngkülĕ) lived in a great sweat-house far to the north, with a great many other people who were her brothers. . She had a sister, Eagle (Kā′kangkülĕ). They were the only two women in the sweat-house. The house was on the edge of a great lake, and had its door to the north. To the north of the house was the lake for the people to bathe in. Loon went to the lake, and found in the water a great quantity of hairs that her brothers had lost. She pulled out some of hers to see how long her brothers' hairs were, compared to her own. Next day she did the same thing, taking a hair from each man. She found her hair was the longest. She wanted to find one of the same length. There was one man in the sweat-house who took a bath every two days, instead of every day as did the others. Loon was in love with him, and wanted to marry him. The following day this man was in the crowd who went in bathing. She collected the hairs again, measured them all, and found one which was just as long as hers. Next day she waited for them all to go in bathing again, then, painting herself with charcoal, she lay down in the trail along which they would all come back. All her brothers and cousins came by, but paid no attention to her. Coyote was among them, however, and he staid behind and took possession of her. After he had gone away, she came to the house and called Wood-Bug (Tsā′nkupĕ). He was the prettiest of all. She stood by the door of the house and called out, "Come on, my husband, let us go!" Now, the chief in the house was So′kotim maidü, and he said to the Wood-Bug and to Coyote, "Which of you did this?" Then he said to Coyote, "You go." When Coyote went out, the woman said, "I don't want you, I want my husband." The chief sent out another man; and Loon said, "No, you are not the one. If you don't send out the right one, the house will burn up." Then she went off a little way and began to sing, telling the one she wanted to come out. As she sang, flames of fire would run from her toward the house, but would die out and disappear before they reached it. The chief kept sending one man after another, till there were only two or three left, the one she wanted among them. The chief then asked Spider to make him a net. The house seemed to be catching fire from the flames which the woman caused.

---

[1] See Boas, Tillamook, p. 38; Kathlamet Texts, p. 10.

[2] Told at Genesee. Compare Curtin, *l. c.*, p. 407 seq. The Pit River Indians have nearly the same story.

She called out, "Hurry up, send out my husband, or the Sun will overcome me, and burn the house." The chief sent out the last one except the one she wanted, and then dressed up this one, giving him, before he sent him out, something which would prevent him from having any connection with the woman. The chief said to Spider, "Hurry up, make that net!" Before the man that she wanted came out, the woman was singing loudly, and turning slowly round and round, and the fire would dart out almost to the house. When the one she wanted came out, she seized him and went off. The sun was already sinking, but she looked at it, and made it go down at once, so that it was night.

The man lighted a fire, brought in boughs and stuff for a bed, and laid a log along each side of where they were going to sleep. Loon said, "Hurry up and finish the bed, it is time to sleep." It was not yet time to go to bed, but the woman was in a hurry. She could not wait, but pulled the man down on the bed. Then she said, "I am going to conquer this country. I will make a good country of it." Nec tamen præ glande peni a magistro vici imposito cum ea poterat coire. The woman said, "People here can say by and by that I went crazy and married my brother long ago. Even if they do not overcome me in this world, people from now on will go crazy." Before morning she fell asleep from fatigue. The man then gently took one of the logs, rolled it on the woman, and himself crawled off, then went away to the house they had left. By this time Spider had made the great net; and Wood-Bug with all the rest of the people got into it, and all were drawn up into the sky, so that Loon could not get at them again.

When Loon woke up, she found the log instead of the man. She gave a great yell, and started to hunt for him, running along with the fire darting out in great tongues before her. As she came close to the sweat-house, she saw it was in flames, and said, "When people talk of these things hereafter, they can say that I went crazy. Because of this, other people will go crazy." The woman's sister, Eagle, followed the others who were drawn up to the sky, saying, "I will go up too, and watch over my brothers." When Loon saw that the house was completely burned and the people all gone, she gave a loud cry and fell down dead. By and by, however, she came to life again, and went down to the lake, where there were many willows. She broke off several and went back to the place where she had fallen when she saw all the people had gone. She wove the willows into a scoop or seed-beater.

When the people had got into the net to be drawn up, Lizard was the first in, and was at the bottom. He could see a little through the bottom of the net, and saw all that Loon was doing. He said to the rest, "I will look back and see what is going on. I am sorry for my sister." So he took his finger and made the opening a little larger in order to see better; but as soon as he did so, the net tore, and all fell down, right into the midst of the blazing sweat-house. There their hearts began to burst from the heat, and to fly out through the air. Lizard's was the first. Loon saw it flying up, and caught it with her scoop. Another flew up, which she caught in the same way. The third she tried for she missed, and instantly fell dead. By and by she came to again. She missed the hearts of all the best ones. All this time Eagle was circling about in the sky overhead, watching where the hearts fell. She said to herself, "Into whatever valley they drop, on whatever mountain they fall, I shall find them." For a long time the heart of Loon's husband did not burst. Finally it did, however, and she missed it. Then she fainted again. When she came to, she went to the pile of hearts she had caught to look at them, and, on finding that she had lost all the best ones, fainted again. Then she came to once more, and strung the hearts she had on a string for a necklace. She then went away to the north, and finally came to a lake. She jumped into it with the string of hearts on, saying, "People can say, when they speak of these things, that in the long ago Loon jumped into a lake with her brothers' hearts. She was crazy when she did it."

About this time Eagle began to hunt for the hearts that had flown away. She found all but two, those of the best men of all. She went farther to the north. Here she came to the grandmother of Water-Ousel. She spent the night with her, and asked if she had seen or heard anything. She and her children lived on the edge of a lake, and used to go there to shoot ducks. They said, "Yes, when we go to get ducks, we see something wearing a necklace of hearts swimming by." They told Eagle where it started from,—a great rock on the north side of the lake, whence it would come with a loud cry. Eagle wanted them to kill this person, and said, "I left my bow and arrows behind, with all the things that my brothers left. I will go and get them, and then you can kill this thing." She went back, therefore, to the sweat-house, found a bow and arrows, and came back. She was singing all the time, as she thought that she was going to get the hearts back. She gave Water-Ousel the best arrows, and they went down by daylight to look for the thing. While they were there, they heard it cry and saw it swimming. When Loon drew near, she was looking at herself in the water, and did not see them. They both shot at the same time; and at once Loon dived, and did not come up for half a day. They shot at daybreak, and she did not come up till noon, but then she came up dead. They brought her ashore, and then called Eagle. She said, "People will call you Loon. You will never be able to harm people again. You will be a bird that can be killed. People will say, "In the olden time Loon went crazy, and had her brothers' hearts, and was killed." Then Eagle started back.

When she arrived at the place where the house had been, she threw the hearts into the lake where the people used to bathe. Next morning all the people had come to life, and came up out of the lake. Then Eagle left for the north again, to find the two hearts that were still missing. There was a woman living there who had two daughters. She was pounding acorns, and the daughters had gone for wood. They heard something singing beautifully, and followed the sound to find out what it was. Following along a small stream, they came to a deer-lick, where there were a great many deer-tracks. It was to this spot that the two missing hearts had flown. They were crying, and it was their tears that made the salt-lick. The girls saw the tips of the hearts sticking up out of the ground. The girls at once made some digging-sticks, and began to dig up the hearts, forgetting all about the wood they had gone for. Finally they dug them up, and started for home, each carrying one. When they got there, they covered them with their blankets, and went to bed. In the morning the hearts had come to life, and married the two girls. One of these was Wood-Bug, the other Fisher (Inbukim).

By this time Eagle reached the place where they were living. She said, "When people die, it will only be necessary to put them in the water, and in the morning they will be alive again. If we are beaten on this point, people will have to die and not come to again. If we get beaten, we shall have to be what we are." When she found that the two hearts had come to life, she left them there, and went back to where the sweat-house used to be. She was going to stay there to hear what the others would do. She said, "If we get beaten, the sweat-house will turn into a mountain, and we will scatter." They staid there then to see what would happen.

8. Sun and Moon.[1]

1. Far to the north Sun (E'kim po'ko) had built a big house of ice. The house was as large as a mountain, and no one could climb up and get in. Sun could therefore kill people and steal them. She thought she would live forever. From the house she started and went north. She found a Frog (We'lketi küllokbĕ), who had three children. She stole one without the mother knowing it, and carried it home. The old Frog hunted everywhere for her child, but could not find it. Two days after this, Sun went again to the north, to the place where Frog lived, and stole another child. Frog missed her child, and tried to find it, but could not. She tried to think how she had lost it, but could not solve the mystery. Sun meanwhile waited and waited, and thought how she

---

[1] Told at Genesee.

could get the third child. She waited ten days, then said, "If I start this time, I'll go straight to the house." She did so. Frog was sitting on the east side of the house, making a pack-basket. Sun went in and sat down on the west side; and, the door of the house being to the north, she planned to take the child off to the east, and so around to her house. Frog had three pieces of grass and three pieces of willow in her mouth, out of which she was making the basket. Sun said, "Why are you sitting here in this lonely place?" Frog asked the same question, suspecting that this was the person who had been taking off her children. Sun replied, "I'm travelling about because I am lonesome. I am harmless." Frog thought to herself, "That is always the way that you talk, you think that no one knows anything about you." Pretty soon Sun said, "I am going now. I am going to see what sort of a country I can find near here." At this moment the last of Frog's three children went outside to play. As Sun went out, she seized the child, and ran off at once to her own home. She made a patch of willow (Tsū′pim) grow up behind her, so fine that any one who followed would stop to pick some. The old woman ran after Sun; but when she came to the willow-patch, she stopped to pick some, and forgot all about what she had gone for. By and by she remembered, however, and ran on. She nearly caught up with Sun, who just succeeded in getting into her house before she could seize her. Frog tried to climb up the side of the house, but could not do it, for she slipped and fell back after getting only halfway up. She tried again and again, and after many trials succeeded in reaching the top. She called to Sun, "This is what you have been planning out to do, is it? What are you going to do now? Do you think you are going to be killed by me, or are you going to kill me as well as my children? What day did you think you would see me? Come up here and let us see if you are the sort that cannot be killed?" Sun said, "What can you do to me?" Frog showed her her mouth, and said, "Come up, and you will see what I can do." Sun started up; and as she came up out of the entrance, Frog swallowed her quick as a flash. Then she crawled away to one side, and lay there a long time, thinking, wondering what Sun would do. Soon she began to feel Sun moving about inside of her, beginning to swell, and grow larger and larger. Thought she, "If Sun keeps on growing larger and larger, and in this way conquers me, there will be people in this world who will steal." Before long Sun had grown so much that part protruded from Frog's mouth, and, continuing to grow, she finally burst Frog in two, and killed her. Then she said, "If people find others stealing, they can follow them and kill them." Then she said to Frog, "You can be a Frog, and live in the water. Let people alone. I will be the Sun. We will neither of us harm people." Then she spoke to her brother, Moon, and asked, "Do you wish to be Moon or Sun, to travel by day or by night?" Moon replied, "You try travelling at night." So Sun tried it; but the Stars all fell in love with her, and she could not travel because of their attractions. The Pleiades started to follow her, but she saw them, and they stopped. When she found she could not travel, she went back, and told her brother that he must go by night. This he agreed to, and has kept it up ever since.

2. Sun and Moon were sister and brother. They did not rise at first. Many different animals were sent to try and see if they could make the two rise, but failed. None of them could get into the house in which the brother and sister lived. This house was of solid stone, and was far away to the east. At last Gopher and Angle-Worm went. Angle-Worm made a tiny hole, boring down outside, and coming up inside the house. Gopher followed, carrying a bag of fleas. He opened it, and let half of the fleas out. They bit the brother and sister so, that they moved from the floor where they were to the sleeping-platform. Then Gopher let out the rest of the fleas, and these made life so miserable for Sun and Moon, that they decided to leave the house. The sister was afraid to travel by night, so the brother said he would go then, and became the Moon. The sister travelled by day, and became the Sun.[1]

---

[1] Told at Mooretown, Butte County.

9. Bear and Deer.[1]

Bear and Deer once lived together. Each had two children who played together all the time. Deer used to go off to gather clover, and one day Bear planned to kill her and eat her. Deer had told her children that day that if she did not come back, it would be because Bear had killed her. When Bear came home alone that night, the two children suspected that something was wrong. Bear said that Deer had gone away somewhere. That night, however, the two little Deer looked in Bear's basket of clover, and saw some of their mother's flesh.

Next day the two Deer and the two Bears were playing together. They built a camp and sweat-house. The two Deer went in first, and told the Bears to fan the smoke into the sweat-house, and that when it got too strong, they would call out to stop, and let them out. The Bears did as told, and after the Deer had come out, went in themselves. When they came out, the Deer went in again, and then the Bears; but this time the Deer did not stop when the Bears called out, and in this way smothered and killed them. Coming back to the house where Bear was, they told her that the two little Bears were still playing. Then collecting a quantity of a sort of herb with berries on it, they shot it all about, and then ran off to the north, toward Big Meadows.

Bear could not find her children for a long time, but at last discovered them dead in the sweat-house. She at once called after the two Deer; but the herbs answered for them, and she went now here, now there, in vain. At last she found their trail, however; and near the edge of Big Meadows she came up with them. The two Deer saw a huge rock near by, and, jumping to the top of it, told it to stretch. It did so, and rose up as high as a small tree. Bear asked how to get up. The boy answered, and said he would help Bear up with the aid of the string of his sister's apron. When he let it down, he said, "When you get nearly up, shut your eyes and open your mouth, for I can't pull you up otherwise." Bear did as she was told, and just then the sister threw a red-hot rock into Bear's mouth, and the brother let Bear fall. Then the rock decreased in size again, the Deer jumped off, and ran on.

---

[1] Told at Genesee. Compare Teit, *l. c.*, p. 69; Boas, *l. c.*, p. 81; Powers, *l. c.*, p. 341 et seq.; Gatschet, *l. c.*, pp. 118 et seq.; Boas, Kathlamet Texts, pp. 118 et seq.; Curtin, *l. c.*, p. 456.

By and by Bear recovered, and gave chase. The two Deer came to a river where their grandfather Shitepoke was sitting and fishing. They told him their story, and asked if he would help them across. So he stretched out one leg, and they crossed the river on it as a bridge. Then Shitepoke took them to his house, and covered them with a blanket. Soon Bear came along, and asked Shitepoke if he had seen the two Deer. He said, "No." Bear then said, "Their mother is looking for them everywhere, and I am sent to bring them home." Then Bear asked if he would help her across. Shitepoke agreed, and stretched out one leg for her to cross on. When Bear was about halfway over, he bent his leg and pulled it back, so that Bear fell into the river and was drowned.[1]

There was once a Deer who had two children, a boy and a girl. Near them lived a Bear who had a single cub. One day the mother Deer went out to get angle-worms. She hung a small brush on one of her children, and said, "If any harm should happen to me, the brush will fall off." The Bear cub was left to play with the two Deer. While the Deer was gathering the angle-worms, the Bear was in a rock-pile getting snakes. She filled her basket, and, coming along, met the Deer. The two went on together to a sand-bar in the river, and here were to eat their dinner. When the dinner was over, the Bear said to the Deer, "You have lice on your head; let me take them off for you." For a long time the Deer refused, but finally agreed. The Bear gradually worked along down to the Deer's neck, then suddenly bit her head off and killed her. At this moment the brush which the Deer had tied on one of her children fell off. The children knew that their mother had been killed, so they jumped at the Bear cub and killed it. They buried it, first taking off one of its claws, which they placed in a comb made by the yellow-jackets. When the old Bear came home, the children asked where their mother was, and were told that she was coming. The old Bear asked where her cub was, and the young Deer replied that it was asleep. Then they ran off. The Bear ate the yellow-jacket's comb, and, finding the claw in it, knew that the cub was dead. The two Deer meanwhile had collected some berries, and had shot them in all directions, before running away for good. The Bear came running out as soon as she found that her cub had been killed, and called to the two Deer; but the berries answered for them, and the Bear went here and there in a vain search. Finally she did find their track, and, following it, came in sight of them. The two Deer had jumped up on the top of a very tall rock, and, as the Bear came, they told the rock to stretch, and grow taller yet. It did so, and the Bear came to the base of it, but could not climb up. The two Deer then lighted a fire on the top, and heated stones red-hot. The Bear asked how she could climb up; and they told her to shut her eyes and open her mouth, when she would find it easy. The Bear followed their advice, and just as she reached the top the girl threw a large hot rock into the Bear's mouth, and killed her. The tall stone, with the tracks of the Deer and Bear, is still to be seen at Bald-Rock.[1]

---

[1] Compare Curtin, *l. c.*, p. 450.

Grisly Bear and Deer went down the Cosumnes River, below Plymouth, to pick clover. They had a race to see who would get there first, and in the race Deer won. By and by Bear came, and they began to pick clover. After a while Deer said, "Sister-in-law, the lice are biting me." Bear started to bite the lice out, but bit off Deer's head and killed her. Then Bear ate Deer all but her head, which she carried home in a basket. There were two little Deer who were the children of the one who had been killed; and they, having been left at home, began to cry. When Bear came home to where they all lived, she told the little Deer to go to the basket and get the clover that was there for their supper. The youngest went, and saw his mother's ear at the bottom of the basket. He went at once and told his older brother, who would not believe it, but went to look for himself. That night the two Deer burned all the store of seeds that their mother had laid away for the winter. Bear asked them what they were doing, and they replied that they were burning bark. Next day, while Bear had gone to pound acorns, the two Deer took some water and boiled it. Then they seized Bear's child, and threw it into the boiling water; and when it was dead, they cut off the skin in strips as if the little Bear was painted. Then they went and collected wood in order to cook some acorns. When the old Bear got through pounding acorns, she saw her child leaning against a rock, dead. Bear then began to call out for the two Deer. They had piled a lot of wood in a long row, and at the end of it placed four quartz rocks. . . . While Bear was chasing the Deer, they climbed a big rock, and their tracks are still to be seen to-day. . . . Bear asked the Deer where they had crossed the stream, and they replied, "We crossed right there. Open your mouth when you swim." Then the oldest one took a hot rock and threw it at Bear, and missed her three times. The youngest one then seized a rock, and threw it into Bear's mouth. It passed right through Bear, and came out at her tail. Then the two Deer called all the other animals, and they came and skinned Bear. After Bear's hide had been spread down, the two Deer were lying on it. The youngest lay on his back, and saw something coming down from far up in the sky. He cried, "There's my uncle coming, there is Spider (Pusso)!" The older brother would not believe it at first. By and by Spider came down, wrapped the two in Bear's skin, and drew them up to the sky with him. When Spider and the Deer reached the sky, the two Deer began to play ball, rolling it along the ground. The youngest followed it and saw his mother. The older brother did not believe it was their mother at all. The younger one then went and was nursed at his mother's bosom, and, coming back to where his brother was, spat the milk out into his hand; then his brother believed. Then they both went to live with their mother again. One day they were thirsty, and wanted a drink. Their mother said, "It is hard to get any water here." She went, however, to get some, fell in, and was drowned.[1]

---

[1] Told at Mooretown.

10. *Coyote Tales.*[2]

1. Fox went hunting one day. He chased an Elk far away to the north, then circled around to the east, and drove him back to the place whence they had started. Before they got back to their starting-point, Fox grew tired of the chase, and left Elk to go on by himself. When Elk had nearly reached the place whence he set out, he passed by Porcupine, who was lying in a hollow tree. As he did so, Porcupine shot and killed him. Porcupine came out from his hiding-place, and stood around, thinking how he should skin Elk. He said, "I have no knife. I must hunt up a sharp stone: I can use it for a knife. I wonder why I shot him, when I have no knife to skin him with and cut him up."

Coyote was going along the side-hill just at this time, and heard Porcupine talking to himself. He wondered what it meant, and ran down to see. Porcupine picked up a piece of stone and said, "I wish you were sharp." Just then Coyote came along. He said, "What are you talking about all the time? What are you saying to yourself?" Porcupine replied, "I am talking because I have no knife. I killed an Elk, and now I can't skin him." To this Coyote answered, "If you will give me half the Elk, I'll let you have my knife." Porcupine said, "No, you ask too much. I'll give you one quarter if you will let me have your knife." Coyote agreed to this. Porcupine took the knife and began to skin the Elk, while Coyote sat on a rock near by and watched him.

When Porcupine had finished skinning the animal, and was about to pull off the skin, Coyote called out, "Stop! Let me tell you something good. Let us get out here and jump, and the one that jumps the farthest will get the whole Elk." Porcupine stopped and said, "No, I won't do that. I can't jump." Coyote replied, "Do you suppose a fellow like me can jump? But if you won't jump, let us wrestle." Again Porcupine refused, and said, "No, do you think a fellow like me can wrestle? I cannot wrestle." Then Coyote said, "Let us run a race. You look as if you could run." But Porcupine said, "No, I can't run." Finally Coyote said, "Well, put the skin over the Elk, and then we will run, and see who can jump farthest over it." Porcupine replied, "Do you think I can jump? But if you want to jump this way, I'll try. You begin. We must have two turns apiece." Coyote went back a little ways, trotted up to the skin, and hopped over easily. Porcupine came along, and barely succeeded in getting over. Coyote was glad. He clapped his hands and laughed. He thought he should surely win. He started on his second jump, but, just as he rose over the Elk's body, Porcupine said to the skin, "Rise up!" and it rose, so that Coyote only barely got across. Then Porcupine jumped the second time, and won the Elk. He began to cut it up, and Coyote sat by and looked on. When Porcupine had the meat all cut up, he looked over and saw Coyote. Feeling sorry for him, he cut off a piece of the Elk's lights, and gave it to him. Then he kept on cutting, and turned his back on Coyote, who stole a quarter and a shoulder, and ran off, leaving his knife behind. Porcupine piled up the rest of the meat in the hollow tree, and lived there for some time.[1]

---

[1] Told at Nashville, El Dorado County.

[2] For other coyote tales see R. B. Dixon, Some Coyote Stories from the Maidu Indians of California (Journal of American Folk-Lore, Vol. XIII, pp. 267–270).

2. Coyote was travelling eastwards. He had a small dog with him. After he had gone quite a ways, he met Snow-Hunter.[2] Snow-Hunter had a big dog, and proposed to Coyote that they should let their dogs fight. Coyote said, "No, my dog is too small. Let me think about it." He went off a little distance and defecated. He looked, and saw that it was a mouse's head. He asked it, "What shall I do? If I fight, shall I win?" He was answered, "You must not fight. If you do, both you and your dog will be killed." Coyote was angry. He said, "That's what you always say.

---

[1] Told at Genesee. Compare Kroeber, *l. c.*, pp. 270 et seq.

[2] This term is apparently also used to refer to the Pit River Indians.

You always prophesy bad luck." So he kicked it downhill. He defecated again, this time a bunch of grass. He asked, "What shall I do? Shall I fight?" This time he was answered, "Yes. You must fight. You will win, and kill both the man and his dog." Then Coyote was pleased, and said, "That is what I like. You are a good fellow." He went back to Snow-Hunter, and said, "All right. We will let our dogs fight." They did so, and after a while Coyote's little dog killed Snow-Hunter's big dog. Then Coyote and Snow-Hunter fought, and in the end Coyote won. Coyote got the best of him, killed him.[1]

3. Coyote and his grandmother were living in a sweat-house all alone. One day Coyote heard some one shout far off to the east. He said to his grandmother, "I hear some one shouting." She replied, "That is something bad. Do not answer it." Then Coyote said, "What is bad about it?" and gave a shout in answer. Pretty soon he heard another shout, and again Coyote answered. By and by the shouts came nearer, and Coyote began to get frightened. He said to himself, "How can I save my grandmother's life? I know what to do: I'll dig a hole in the floor, and bury her." So he ran in, dug a hole, threw his grandmother in, covered her up, and smoothed the earth down nicely. Then he ran out again, and heard the shout close by. He answered, and then wondered how to save his own life. He ran off up behind the house and defecated, and inquired of his excrement what he should do. The first replied, "You will be killed." Coyote kicked it away down the hill, and asked a second. He was told, "You must hurry, run to those trees, gather all the pitch you can find, and carry it down to the fire. Warm it there, so that it will stick together, and then plaster it thick all along your belly. When the person comes, and asks you if he may cut you open and take the fat from your entrails, say, 'Yes.' Let him do it to you first." Coyote did all this, and then the person arrived. It was Snow-Hunter. He came up and said to Coyote, "Grandmother-Burier." Coyote replied, "Are

---

[1] Told at Genesee. Compare Teit, *l. c.*, pp. 30 et seq.

you crazy? Did you ever see any one bury his grandmother alive?" Then Snow-Hunter said, "Let us take the fat from our entrails and eat it. I will take yours, and you can take mine." Coyote said, "All right! Take mine first." Then he lay down, and Snow-Hunter began to cut off the pitch which Coyote had plastered on his belly. Coyote lay there, groaning, and saying, "Oh, oh! you are cutting too deep, you are killing me!" There was a big fire ready; and when Snow-Hunter had cut off what he thought was the fat, but which was only the pitch Coyote had put on, Coyote rolled over, and groaned that he was killed. Snow-Hunter took the pitch to the fire, and began to cook it. It began to soften and melt. He turned it over and over, and thought it was the fat that was cooking out: so he took it off the fire, and began to eat it. It did not taste very good, and he said, "It doesn't taste very good, but I will eat it, anyway." When he had eaten it all, Coyote got up and said, "Now let me try you." Snow-Hunter said, "No, you won't eat me." Coyote said, "Oh, yes! I will: let me cut you. I won't take but a little piece. I do not eat much. I shall not need a great deal." Then Snow-Hunter said, "All right! but don't eat much." Then he lay down, and Coyote took a knife and thrust it in up to the hilt, and ripped Snow-Hunter up, and killed him. Coyote then said, "People can call you Kōm maidu. You will never be seen, you will be invisible." Then he dug his grandmother up, and they lived there always.[1]

4. People were angry with Coyote. They all agreed that every one should come in from north and east, from south and west, and crowd all the Coyotes into the centre of the country, and then they would kill every Coyote. They did this, but overlooked one. He was an Initiate (Yŏ′ponim), and the chief of all. They hunted everywhere for him, and at last they found him. Then they looked everywhere for the largest tree they could find, and finally found it to the west. It was a great yellow-pine, and, having split it open, they put Coyote inside, and let the tree close together over him. They

---

[1] Told at Genesee.

thought they had killed him this way. The chief called all the people together and said, "As you spread out to go home, see if you can hear any noise like a Coyote." The pine-tree was hollow, and so Coyote was not crushed to death, as the people thought. He was merely imprisoned. By and by Red-headed Woodpecker (Ma'kmakkö) came, and began tapping on the log, as it sounded hollow. He worked away for two days, and all this time Coyote lay still and listened. At the end of the next two days he could see a faint spot of light. Next day Woodpecker came again, and enlarged the hole he had made, so that Coyote could see quite a little light. By and by Coyote said, "Cousin, make the hole bigger, please;" but the Woodpecker was frightened, and flew away. Then Coyote got angry, and said, "The reason people call me crazy is that I don't know enough to keep quiet."

The bird did not return, and Coyote wondered how he was to get out. At last he defecated, and inquired how he could get out. He was answered that he would never get out, but that he would die in the tree. Angry at this prophecy, he defecated a second time, and, on questioning his fæces, was told to transform himself into a fog, and thus pass through the small hole that Woodpecker had made. He did so; and as soon as he came out, he again became a Coyote. He said, "I'm a Coyote, and can never die. People may kill me, but there will always be Coyotes left."

When the people had put Coyote into the tree, the chief had said, "If we hear nothing of him for six days, we may be sure that he is dead." Coyote, however, got out on the fifth day, and started back toward this country. On the sixth morning, just at daylight, he began to howl, just to let people know that there were some Coyotes left. The people heard him, and said, "We hear Coyotes crying. They are still alive." They hunted for him again, caught him, and took him to the west, to a great lake in the middle of which was a rock, from which he could not swim away. They put him on the rock; and the chief said, "If another six days go by, and we hear nothing of him, he will be dead." Coyote thought a long time as to how he should get away, but could not think of any way. So he asked the advice of his excrement, as before. The first time he asked, it said, "How do you think you can get away from here? You will have to stay till you die." The second time he was, as before, more successful, and was told, "You will live. In the morning, if you watch, the fog will rise. When it does, get off on it, and travel to the east, back to the land." Coyote followed this advice, and on the sixth day he reached land again, and, coming back to this country, began to howl. He said, "People can say the Coyote will never die. The Coyote can never be killed off. Wherever I urinate, even if I am killed, there will be another Coyote again." The people heard him howling, and said, "He has got the best of us. He has beaten us. Let us give him up." Then Coyote went off, saying to himself, "I'm going to travel through the middle of this world; and in every valley I come to, I'll catch mice for my living. I'll be a Coyote."[1]

5. A man was fishing. Coyote came along, and asked him if he was catching any fish. The man answered, "Yes." Then Coyote asked the man to give him some, and the man said, "Go on up the creek, and light a fire. By and by I will come, and we will cook the fish." Pretty soon Coyote came back. The man said, "I told you to go farther up and build the fire." Coyote went back and built another fire farther away, then came back again. He received the same answer, and, on building another fire, came back once more. This time he told the man that if he did not give him some of the fish, he would steal them. The next time he came back and was disappointed. Then he went on the other side of the creek, and made a jump at the man. The latter turned so that Coyote landed on a bag of deer-bone fish-hooks, which caught his feet. Coyote begged to be released, but the man refused; and finally Coyote tore himself loose, and ran off, saying, "People can call me Coyote."[1]

6. The young Deer were living with their grandfather Shitepoke. Coyote came to court the girl, kept coming, and

---

[1] Told at Genesee.

staying very late, — till midnight or morning. Finally he told the old Shitepoke what he wanted, and the latter agreed to let him marry the girl. So Coyote took her away to his camp. After a while the wife grew lazy, making Coyote go for water, etc. He grew tired of this, and one day told her to go for the water. She did not answer; and after speaking several times, Coyote got angry, seized the woman, and threw her up out of the smoke-hole. Her deer-skin robe caught, and remained hanging down, while the woman went off back to her grandfather's. Coyote thought that his wife was still sitting up on the roof, and called to her to come down. She did not answer. Then he said, "If you don't come down, I'll pull you down." Still she did not answer: so he jumped up, caught the robe, and gave it a pull. It came easily, and Coyote fell over into the fire with the robe on top of him. He was nearly burned to death, but finally came to, and went away, saying, "People can call me Coyote." [1]

7. Coyote once wanted a woman, but could get no one who would have anything to do with him. So he resolved on a trick. He built himself a sweat-house, cut off his membrum virile, and made a baby of it. He made himself look like a woman, and invited a lot of women to his house for a big feast. When they came, all danced for a while, then ate, and then lay down and went to sleep. As soon as all the women were asleep, Coyote turned himself back into a man, cohabited with the women, then went away. In the morning the women woke up. They found that some had children, others were in the pains of child-birth. There was no dance-house, everything was gone.[1]

8. Coyote lived with his grandmother. She was pounding acorns one day, and wanted some wood to make a fire, for the purpose of heating the stones with which she was going to cook the meal. So she sent Coyote after some wood. He went up on the side-hill, and was starting back with an armful when he heard some one singing. He stopped to listen, and

---

[1] Told at Genesee.

said, "It is a woman. I'll go and see her." So he dropped his load of wood, and followed the singing. He followed all day, but could not catch up. Night came, and he took some grass and made himself a bed in a hollow tree. In the morning, when he woke up, he found that the tree had grown up over him, and that he was a prisoner. He did not know how to get out. Presently he heard a woodpecker tapping; for the tree was an old one, and had many worms in it. Coyote called out, thinking it was some friend, but only scared the bird, which flew off to a neighboring tree, but soon returned. A second time the bird was startled and flew away, but again came back. By this time Coyote knew that it was a woodpecker, and kept still. After a while the woodpecker had pecked a hole through, and Coyote, overjoyed at the sight of daylight, again scared the bird away. He was now in a quandary as to what to do. He had one resource left, however. He defecated, and then asked the fæces what to do. They could not tell him; so he tried again, and this time the fæces told him to turn himself into a mist, and, so doing, he passed easily out of the hole made by the bird, and was free. He turned himself back into his normal shape, and hurried on after the woman. He followed all the way to Sacramento Valley (To'kongkoyo), and here he saw the woman, Loon, lying in a sweat-house in the middle of the river. He could not get to her there, so he came back home to his grandmother again, saying, "People can call me a Coyote."[1]

9. One day Coyote was watching some Humming-Birds darting about, and hanging apparently motionless in mid-air. He thought, "If I could only do that, all the girls in the country would fall in love with me." So he asked one of the Humming-Birds, "How did you ever learn to do that? Teach me how to do it too, my cousin." Humming-Bird replied, "The way that I learned to do it was to pick out a tall tree, climb up into it, and jump down; and just before hitting the ground I would say, 'Piū'nū!' and that would turn me up-

---

[1] Compare Burns, *l. c.*, pp. 311 et seq.

wards again, and prevent my being hurt." Coyote was delighted, and went at once to find a suitable tree. He found one, climbed up, and leaped from the top; but before he could say, "Piū′nū!" he struck the ground and was killed. He lay there for a long time, till he was all dried up. Then two Crows came along, and began to eat his eyes. Just at this time Coyote came to life again, and called out, "Did you think I was dead? I was only asleep, so let me alone." Then he took a club and tried to hit the Crows, but they flew away. As he lay there he looked about, and saw many large black crickets. He had been there so long that he was nearly starved, so he picked them up one by one, and ate them; but he did not seem to be able to appease his hunger. He ate and ate, but was just as hungry as before. He wondered to himself, "Why can't I fill up on them?" By and by he looked behind him, and found that he had lain there so long that there was a big hole in him, and the crickets were crawling out as fast as he swallowed them. When he saw this, he laughed, and said, "Well, people can call me Coyote."

10. Once, before men had been made, all the animals went in search of fire to the south, to a burning mountain. They got there after a long journey, and went in after it. While most of the people were away getting the fire, Fox (Hā′wi) took Coyote off somewhere, so that he would not make trouble. The people were coming back with the fire. They tossed it from one to the other as they went. Coyote saw them, and, escaping from Fox, he got in ahead of the others and caught the fire in his mouth. It burned him, so he dropped it in the grass, and in a moment it spread everywhere. Most of the animals and birds were burned. Coyote ran north, but the fire began to gain on him. It burned the tip of his tail, and he howled with pain. As he went along, he asked everything he came to, "How are you going to be when the fire comes?" And the squirrel-hole answered, "Red-hot;" and the lake answered, "Boiling hot;" and the brush-thicket answered, "I'll be in ashes." So Coyote ran on. Presently he came to a hollow log, and, without asking it any

questions, he crawled in. Soon the fire came and burned up the log, and with it Coyote; but when the fire had gone out, he came to life again, and came back to where the other animals were living.[1]

11. Coyote had a sister-in-law who was called Bear (Pā′no). Coyote told his wife one morning that he was going to see his sister-in-law. His wife said to him, "Don't be too rough." He said, "All right, I'll be careful. I just want to see what she is doing." When he got to his sister-in-law's, he made fun of her while she sat making a basket. She grew angry at his jokes, and jumped on him, and began to bite him to pieces, and scatter him all about. But Coyote all the time kept on laughing and saying, "Don't tickle me so, don't tickle me so." As long as she did not destroy the little finger on his right hand, she could not kill him.[2] By and by Bear began to get close to this finger, so Coyote bit her in the paw, and she dropped dead. Then he went back to his wife. She asked him how his sister-in-law was, and he said she was very well. Next day Coyote went again to see his sister-in-law. By this time her body had begun to decay. Coyote began to cry. He told his wife that her sister had died of pneumonia (Tsĕ′sĕsi). They were going to have a big burning. When the Bears came to the chief's house, they saw Coyote there. He began to cry, "The Bears are going to take the village!" But his wife said, "Don't try to make fun. They are coming to let us know when there is going to be a big time." Coyote said, "How can a Bear have a big time?" They all went down to have a big time, and tied Coyote up to keep him from going. He got loose, however, and went. There was a great fight. Coyote ran and ran, till he could run no more; then he crawled into a hollow log. But the Bears came and pulled him out, and ate him.[1]

12. By and by Coyote came to life. He got up and walked along. Pretty soon he reached a little creek where some Blackbirds were eating. He asked them why they were

---

[1] Told at Chico.

[2] See ante, p. 71.

so black and handsome. They said that they had become so by digging a big hole in the ground, building a fire in it, and when the ground was red-hot, getting in and being covered up. Coyote thought this was a very nice thing. He asked if they would do this to him. They said they would. So he helped them to dig the hole and build the fire, and when all was ready he got into the hole. The birds covered him all up and left him. He was burned all up.[1]

13. Coyote saw Turtle sitting on a log. Coyote thought the back of Turtle was very handsome, and so he asked Turtle how he had acquired it. Turtle said that in order to have one like it, Coyote must get a lot of flints (arrow-points) and stick them on sticks, and set these up under a tall tree. Then he must climb the tree, and fall off from a slanting limb on to the points. So Coyote did as Turtle had told him; but he did not get the same fine back. He was killed instead.[2]

14. Coyote was walking along by a river. He saw a sycamore-tree. A leaf blew off from it, and came sailing softly down to the ground. Coyote thought he could do the same: so up the tree he went, jumped off, and was smashed all to pieces.[2]

15. Along this same river Coyote saw some Frogs jumping over a rock and diving under the next one into the water beyond. He envied them: so he asked them if he might play at jumping with them. They said, "Yes." So Coyote jumped; but he struck his forehead on a rock under the water, and killed himself.[2]

16. Coyote had a sweat-house in the Coast Range (Ta'iya-mani). He called a "big time," and invited all the people. They were to have a great race to gamble for their countries. Coyote said, "The ones that lose must stay in the mountains." The race was to be from the Coast Range to Honey Lake. All formed in line, and Coyote said, "After this race, all of

---

[1] Told at Chico. Compare Curtin, *l. c.*, pp. 333 et seq. [2] Told at Chico.

you, winners or losers, will be animals. After this people can call me a great chief. People everywhere can talk about me, and laugh about me. If I am beaten, my food will be mice, and other things like that." They all started. The slower ones were left behind, and staid there. The Jack-Rabbit won, and so gained the Honey-Lake country and all the valleys. Bear, Deer, etc., had to take the mountains.[1]

11. The Fish-Hawk and the Two Deer-Ticks.[1]

Fish-Hawk lived at Big Meadows (Na′kangkoyo). He was married; and his two brothers, the Deer-Ticks, lived with him. In the morning he would go out to hunt, and then later come back with many ducks and geese. The two Deer-Ticks would ask him for some mallard, and then Fish-Hawk would pick out the poorest he had, and throw it at them, knocking them down. They would then get up, take the duck, cook it, and eat it. Every day Fish-Hawk treated the Deer-Ticks in this way. The biggest said to the other finally, "Our brother is treating us pretty badly. How do you think we can stand it? How can we get along?" The younger replied, "I don't think we can get along. We must do something." Then the older said, "Our brother is finishing some arrow-points. When he drops the biggest pieces, pick them up; but don't let him see you do it." Soon Fish-Hawk got so that he would not give his brothers anything at all to eat. Said one of them, "I think we shall have to starve, even if we have a brother who is getting plenty of game." While Fish-Hawk was away, his wife would feed the Deer-Ticks secretly. The youngest brother found a small piece of flint, and gave it to the other, who put it in his bag.

After a while the one brother said to the other, "I'm going out to a deer-trail to see if I can see a Deer coming along. If I see one, I will ask him if we can go off with him. We must do something, or we shall starve to death." So the two brothers went out to a deer-trail and sat there. By and by a Deer came along, and one brother smacked his lips. The

---

[1] Told at Genesee.

Deer stopped and asked him why he was sitting there, and said, "You are a fine little fellow. You had better come along with me. I'm going home." One of the Deer-Ticks replied, "Where are you going to carry me? If you carry me on your head, and get into a fight, you might kill me." The Deer said, "Oh, you can get on my back."—"No," said the Deer-Tick; "if I do, and you go through thick bushes, I might get scraped off." Then the Deer said, "Well, you might crawl under my arm-pit." But the Deer-Ticks would not agree to that, and finally said, "If you will put us on your neck or breast, we will go." To this the Deer agreed, and started off. Then quietly the Deer-Tick took out the bit of flint which he had put in his bag, and began to cut the Deer's throat. The Deer felt it; but by the time he stopped, his throat was already cut. When the Deer was dead, the Deer-Tick went back to the house and told his brother's wife: and she came and skinned the animal, and brought back all its meat, which she hid for the two, and did not tell her husband anything about it. After a while the meat was pretty nearly eaten. There was only a little piece left, and the younger brother had this. He sat with his back to Fish-Hawk, eating it. Fish-Hawk saw him, however, jumped across the house, and took the piece away from him, eating it himself. The little brother died. He said to Fish-Hawk, "All people can call you Fish-Hawk (Tsi′xtsix). We two will be Deer-Ticks (Sū′mim tinī′m)."

12. The To′lowim-Woman and the Butterfly-Man.[1]

A To′lowim-Woman went out to gather food. She had her child with her; and while she gathered the food, she stuck the point of the cradle-board in the ground, and left the child thus alone. As she was busy, a large butterfly flew past. The woman said to the child, "You stay here while I go and catch the butterfly." She ran after it, and chased it for a long time. She would almost catch it, and then just miss it. She wore a deer-skin robe. She thought, "Perhaps the reason why I cannot catch the butterfly is because I have this on." So she threw it away. Still she could not catch the butterfly, and finally threw away her apron, and hurried on. She had forgotten all about her child, and kept on chasing the butterfly till night came. Then she lay down under a tree and went to sleep. When she awoke in the morning, she found a man lying beside her. He said, "You have followed me thus far, perhaps you would like to follow me always. If you would, you must pass through a lot of my people." All this time the child was where the woman had left it, and she had not thought of it at all. She got up, and followed the butterfly-man. By and by they came to a large valley, the southern side of which was full of butterflies. When the two travellers reached the edge of the valley, the man said, "No one has ever got through this valley. People die before they get through. Don't lose sight of me. Follow me closely." They started, and travelled for a long time. The butterfly-man said, "Keep tight hold of me, don't let go." When they had got halfway through, other butterflies came flying about in great numbers. They flew every way, about their heads, and in their faces. They were fine fellows, and wanted to get the To'lowim-Woman for themselves. She saw them, watched them for a long time, and finally let go of her husband, and tried to seize one of these others. She missed him, and ran after him. There were thousands of others floating about; and she tried to seize, now one, now the other, but always failed, and so was lost in the valley. She said, "When people speak of the olden times by and by, people will say that this woman lost her husband, and tried to get others, but lost them, and went crazy and died." She went on then, and died before she got out of the valley. The butterfly-man she had lost went on, got through the valley, and came to his home.

---

[1] Told at Genesee.

13. The Mountain-Lion, the Robin, and the Frog-Woman.

One day while Mountain-Lion was hunting, he saw down the valley a lot of Robins gathering worms. He saw most

---

[1] Told at Genesee.

go away, and then he went down to see if he could get one for a wife. This he did, and went away with her and married her. They had a child in a few days. As they travelled they came to a lake; and the Lion said, "You go around this side, follow this trail, and beyond the other end of the lake you will find my father's camp. If on the way you hear any one call from the lake, don't look around or listen. I will go around the other side, and hunt." So they parted, and went their separate ways.

When Robin was nearly past the lake, she heard some one calling. She did not look around, however. The call was repeated, "Sister, wait for me!" Now, Robin had a sister, and thought that it was she who was calling: so she looked around, and was at once swallowed by Frog. Frog then took the child, and kept on to the house of Lion's father. Lion came back, and, although his wife looked all right, he thought something was the trouble. Frog ate a great deal that night, more than his wife had ever eaten. When night came, Lion turned his back on his supposed wife, and refused to yield to her enticements. Next day the child began to cry, and could not be comforted. That night Lion slept with his wife, and found that she was covered with scales. In the morning he told his parents to give his wife a large dish of wild oats to parch, and to keep up a very hot fire. They did so, and Lion went off hunting. Frog was much overcome by the great heat of the fire, and begged to be let off, but the parents refused. Soon she weakened and died from the heat. By and by Lion came back. He ripped open the body of the woman with his claws (his knife), and found his real wife, Robin, inside. He took her body to the lake, laid it in the water over night, and in the morning she had come to life again. Then they lived together without any more trouble.

14. The Cannibal Head.[1]

A man once had a bad dream. He told it to his wife and child. He dreamed that he ate himself up. He went out the next day with his family to pick pine-nuts. He climbed a tree and picked a great many nuts. Then he came down and told his boy to go up. The lad did so, and, while picking, dropped one of the pine-burrs, which hit his father on the leg. It scratched the skin off, and the man's leg began to bleed. The man wiped the blood off, then he began to lick it off. It tasted good, and he at once began to tear off pieces of his flesh and eat them. He kept on till nothing was left but his head and shoulders. Then he began to bounce about, killing and eating people. Every one ran away. The man finally bounced into a river, and was never seen again. He fell into the river at Ya′itilli, on the western side.

---

[1] Told at Chico. Compare Curtin, *l. c.*, pp. 325 et seq.

15. The Stolen Brother.[1]

Mo′loko stole one of two brothers. The remaining brother sought everywhere for him, but in vain. He asked Moon if he had seen his brother. Moon said, "Yes, Mo′loko took him." The boy was delighted to hear that Moon knew who had carried off his brother, and asked how he could get to the place where Mo′loko lived. Moon replied that he could not go there by himself, but that he must have some one to help him. The boy therefore got Lark (Pī′pbĕ) to aid him. He asked Lark to take him along, but the latter replied that he was not large enough. He offered, however, to get his cousin Eagle (Wī′bēm), who would be able to carry the boy. The boy asked Eagle if he was strong enough to take him, and Eagle replied, "Yes, but I can't bring both you and your brother back. I must get my uncle to help us." So he did, and Bald-Eagle (O′poli) came. Eagle asked, "Who will do the killing?" Bald-Eagle refused, on the ground that Mo′loko might see him. All said the same except Lark, who agreed to kill him. All then went off to the east, to a high mountain where Mo′loko lived. The Eagles hid the brother in a tree, while Lark went back of Mo′loko, caught him around the neck, and killed him. Then Eagle took one of the brothers, and Bald-Eagle took the other, and carried them back home.

---

[1] Told at Chico.

16. Lizard and Grisly Bear.[1]

In the south there were many bad Grisly Bears. They used to travel toward the north, where all kinds of people lived, and kill as many of them as they could. Every spring they would go and kill some. They kept doing this until they had killed all the people but two, — Lizard and his grandmother. The grandmother did not want Lizard to go out anywhere, for fear he too would be killed. One day he slipped out, and got away. He went down towards the edge of the valley, and looked around. While he was there, one of the Bears came along, stopped in the middle of the valley, and began to sing and dance. Lizard was watching, and called out, "You big-headed thing, what are you dancing there for? That valley does not belong to you, you big-rumped thing!" When the Bear heard this, he sat down and said to himself, "I thought that I had killed all the people about here. I wonder what that was that called out, and where it is. I have not had any meat for a long time, and I am hungry for meat." So he began to dance again, to see if he could make the person talk again, and so find out where he was. When the Bear began to dance, Lizard said the same thing that he said before. He was standing on the edge of a rocky bluff that was on the side of the valley. By and by the Bear found out where Lizard was. He said to himself, "I think I will go halfway to the bluff and dance and sing again, then I can tell just where the person is." He did so, and again Lizard made the same reply. The Bear thought, "I will go to the edge of the valley and dance again. I wonder how I missed this person before. I hunted all over the country, and thought that I had killed them all." He danced again, and Lizard replied. The Bear looked carefully, looked everywhere, but could not see Lizard, although he could hear him whenever he spoke. The Bear went up on the bluff, and hunted a long time, and finally saw Lizard. He was in a crack between two stones, watching the valley. The Bear came up and said, "Was it you that was shouting, you little thing?" Then the Bear gave a loud shout. Then he said, "What are you staying here for? People such as you have no right to be here. Tell me, were you shouting at me and calling me names?" Lizard said, "Yes." Then the Bear said, "You will have to die. I have come to kill you. I don't want people like you around here." Lizard had found a small flint in his camp before he came out. His father had left it. Lizard had this with him, was holding it underneath his body so that people could not see it. He said, "Well, kill me, then, if you want to." Then he got up on his hands and feet, and the Bear jumped at him with his mouth open to swallow him; but Lizard jumped down the Bear's throat so quickly, that he had no chance to bite him. Lizard had his flint knife between his hands when he jumped; and when he was inside the Bear, he began to cut him all up, and by and by the Bear died.[1] Then Lizard said, "People here will not talk about you and say that you were a great man. They will not say that you killed all the people in this country. Go back to your own country in the south. Stay there. You will be a Pu'suni, a bad Grisly Bear." Then he cut out the Bear's heart, and went home to his grandmother. When he got back, she began to dance. She danced on the Bear's heart till it was all ground up to nothing. Then they two staid there always.

---

[1] Told at Genesee.

17. The Skunk and the Beetle.[2]

Skunk and Beetle were cousins. One day Skunk said, "Let us go over to Honey Lake and get some reeds for arrows." Beetle agreed, and off they went. Beetle was a slow traveller, however; and Skunk left him behind, and went on alone. By and by, having collected all the reeds he wished, he came back, and met Beetle still on the way. Beetle said, "Your arrows are not good: throw them away and get some more." So Skunk agreed. While they were at the lake, they were attacked by the enemy. Beetle shot at them with his bad odor, till this was completely exhausted, and the men were closing in. Then Skunk walked about with his tail held high up in the air. The tip of it just reached above the top of the grass, and all the enemy shot at the tail, so Skunk himself escaped. After a while Skunk got close to the people, and, shooting them, he killed them all. Then the two collected their arrows and came back.

---

[1] See Boas, *l. c.*, pp. 3, 51, 74, 101, 171, 212, 256, 315; Petitot, Traditions indiennes du Canada, etc., p. 319; Dorsey, The Cegiha Language, p. 34; Kroeber, *l. c.*, p. 270; Farrand, Chilcotin, p. 40.

[2] Told at Genesee.

18. The Wolf makes the Snow Cold.[1]

Wolf and his wife lived toward the southwest. They had a daughter, who was married and had many children. The children were out playing, when it began to snow. It kept snowing till the snow was up to people's knees. Then it cleared off. Next morning the children went out and began to play. They made a great deal of noise, shouting and calling to each other, as they played in front of their grandfather's house. The children played all day, and next morning they began again. Toward night the old Wolf grew angry. He wanted to sleep, but the children kept him awake. It was the first time the children had ever seen snow, that was why they made so much noise. Wolf said to his wife, "I will teach those children something." Then he went outside the house, and urinated in the snow, all about the camp. That made the snow cold: before, it had been warm. The children played about a while; but their fingers and toes soon got cold, and they went into their mother's house to warm themselves, and cried. Then Wolf went back into the house, and went to sleep. That is the way he spoiled the snow.

19. Thunder and his Daughter.[2]

Thunder and his daughter lived together. He had fingernails that were like long claws. The daughter wanted to marry Flute-Player (Ya'lulupĕ), who was good-looking. Her father, however, did not want her to do so. The girl said, "I will marry him." Then her father replied, "If you do, I will tear up the ground and roar so that it will make you deaf." The girl replied, "I can do that also." She went away then, and her father could not find her. He went everywhere, looking for her, went as a big thunder-cloud. At last he found her far away in the mountains. He asked her where she had been, and she replied, "Nowhere." He said, "I know better, you have been to see Flute-Player." Finally the girl confessed. Then her father began to roar and tear up the ground, but failed to disturb his daughter. When he found he could not scare her, she said, "Let me try." She began to roar and tear up the ground, as he had done, and soon killed him. If she had not done so, he would have gone on killing people till to-day. After she had killed the old man, she went away and married Flute-Player.

---

[1] Told at Genesee.

[2] Told at Chico.

20. *Huptoli.*[1]

A long time ago there was a burning at Oregon Creek. Some of the people went down to the river, and found there a one-legged man called Huptoli, who lived in the water. They caught him, and carried him up to the top of the hill, and laid him down while all rested. Huptoli, however, jumped up and bounced back to the river. He was never seen again. All the people who had caught him at once fell asleep, and did not wake up for over two days, and then only because the doctors woke them. These one-legged people come even now occasionally and take washing away from the women at the river.

21. *Big-Belly's Son.*[2]

Big-Belly lived at Ta'smam. He had a wife, and a son who went off hunting in the mountains and staid away a long time. Big-Belly could not walk on account of his great size, and so his wife went out every day to gather clover for them both. She would go out in the morning, bring in a big basket full of clover, set it down by the old man, and then take another basket and go out again. The old man was eating all the time. One morning she went out and came back early. She said, "I see something coming that looks like people." Big-Belly replied, "At this time of year it is always that way. A person thinks that he sees people. Whenever any one sees the wind blowing the grass, he thinks that people are coming." The woman went out again, saw the people coming, saw them plainly and very near. She ran back to the house and told her husband, "Some people are after us. I see them." Then the old man said, "Well, help me up, and we will run away." When he had said this, she tried to get him out, but the people got there before she succeeded. These people were Ko'mbo people from Mill Creek. When they came near, they began to shoot at the old man, and filled his belly full of arrows and killed him. They killed the woman too, and then went off home.

---

[1] Told at Mooretown.

[2] Told at Genesee.

By and by the son came back from his hunting. The woman had been with child before she was killed. When the son found that she was dead, he felt of her, felt something move, something that was warm. So he cut the woman open, found the child, took it out, and saw that it was a girl. He made a cradle-board, put the baby on it, and wrapped it up. Then he began to cry. He cried a long time, then took the child with him far off into the mountains where he had been hunting. He would take deer-liver, pound it up fine, mix it with water, and give it to the child. After a few days the child grew rapidly, and soon the man could leave cooked meat with the child, which she would eat when hungry, while he went off to hunt. He would be gone all day, and not get back till night. One day he came back and heard the child crying. When he reached home, he saw that Old-Frog-Woman was there, and that she was holding the child in her arms, and was dancing with it. The child was nearly dead. The man said nothing, but took the child away, went for water, washed the child's face, and gave it something to eat. After supper he went to sleep without speaking to Frog-Woman. She was sitting there, and said, "The child was afraid of me. She did not know me, that is why she cried." In the morning when the man woke up, Frog-Woman was gone. The man tried to feed the child, but it kept looking at him and crying. He thought something was the trouble. He found that while he had been asleep, Frog-Woman had taken off his scalp, and he had not known it. He only found it out by the fact that his sister was all the time looking at him; and then his head began to itch, and when he put up his hand to scratch it, he found his head was all over blood. He said to the child, "Stop crying. The old woman took my scalp. I am your brother. Don't be afraid of me. It is because she took my scalp that I look different." Then the child stopped crying. Next morning he began to carry a lot of wood, and pile it up near the house. Then he began to cook meat, pounding it up fine for the child. Then he said, "I am going away. You must stay here." Then he wrapped the child up carefully, and said, "You must stay here. If I am away long, untie yourself." Then he built a big fire of oak-wood, with lots of coals, and covered it over with plenty of earth. Finally he stuck up his scratching-stick overhead, and said, "When you see that stick drop in front of you, you will know that I am killed. If it drops, take it, and make a hole in the coals with it, then crawl in and burn yourself." Then he went out, found a lot of moss, and made a wig so that he looked like a woman. He took an old basket that had been his mother's, put it on his back, and made an apron and put it on. Then he went off.

There was another country far off to the west, whence Old-Frog-Woman had come. She had carried off the man's scalp to that country; and when he reached there, the people were having a dance around it. Before he came to that place, however, he gathered a lot of roots, pounded them up fine, and made himself look like a woman. He had a cane; and when he reached the place where the people were dancing about his scalp, he acted like an old woman who was very feeble. He slipped his apron around to one side, so that people could see that he was a woman. He went up to some of the women, and sat down. They looked at him, and said, "Poor old woman! where did you come from?" Then they looked again, and saw that she had hardly any apron on. They said, "Hasn't some one an apron to give her?" So they gave her a new apron, and were wondering who she was and where she came from. Every one came to look at her to see if she were playing some trick. Some said, "Yes, she is an old woman. We have seen her before." One person said, "No, she does not belong here;" but the others did not pay any attention to what this person said. While he sat there, the man looked around, and saw his scalp tied to the top of a tall pole. Towards morning the people grew tired, and went to sleep. When they were all asleep, the man got up, climbed up the pole, got his scalp, came down, and started off for his home. When he reached there, he found his sister still alive. He said to his scratching-stick, "Let me see you fall. Let me see what you would have done if I had been killed." He had not yet shown himself to his sister. He was outside, and wanted to see what she would do if the stick fell. In a moment the stick fell, and the child saw it. She was eating, but stopped, and began to unwrap herself. When she was unwrapped, she took the stick, and began to dig a hole in the coals. Then the man came in and said, "Sister, what are you doing? Why are you digging out the coals?" Then he told her about himself, and they lived there always.

22. *Mountain-Lion and his Wives.*[1]

Mountain-Lion lived at Na′kan sē′wi. He went out hunting, came home, and lay on the ground, playing a flute. By and by two girls came in and sat down on each side of him. He got up, cooked some meat for them, and gave it to them. They ate it, and went to sleep for the night as his wives. He said, "This is the way we marry. If we sleep together, and find ourselves here in the morning, we shall be married." After a while he had a child by each wife. Soon the children began to creep about, and get outside the camp. A short distance off they found two good-looking girls. Next day the father went off, and did not come back that night. When he came back the day after, he had killed some deer. The two children found their father the next evening with the two girls they had found. He said, "People can leave their wives and children, and get others. That is how it will be in this world." The first two wives still staid in their camp, and paid no attention to what Mountain-Lion had done. He never went back to his first wives, but went off hunting, and at night lay playing on his flute. The first wives and the two children had now eaten up all the food that Lion had brought before he left them. The children were now able to run about. Every time Lion would come back from hunting, they would go over to his camp, thinking to get some meat. They would watch their father skinning the deer, to see if he would give them any. Lion would cut out the place where the arrow had entered, and where the blood had settled, and give this poor piece to the children. He would throw it at them, and it would stick to them. They would pick it off, and run with it to their mothers. The children would think that they were getting a great thing, but the mothers would cry about it; but they would cook it and eat it to keep from starving. Whenever Lion would come home with meat, the children would cry out, "Here comes father with meat!" then they would run over to get what he gave them. One day the mothers said to themselves, "How can we make a living if the children do not go to their father?" One said, "He is not treating our children rightly." Then she cried. One said, "Do you know of any place where Lion ever lost a piece of flint? If we could find a piece of flint, we could make an arrow for the children, and teach them to shoot, and by and by they could kill their own game."

---

[1] Told at Genesee.

One day the children asked their mothers, "How is it that father makes such pretty music with his flute?" Whenever they spoke of Lion as their father, it made the women cry. One said, "Let us go and make flutes. If they get to playing on them, they may forget about their father." In the morning early they went off to make the flutes. When they were finished, they put them away in the house where they could not be seen. After a while the father came home, and began to play on his flute. The children went up on the top of the house, and listened to the music. The mothers said, "When it gets daylight, we will go off before the children know it, and make them some bows and arrows. When we get them made, we will show them to the children." They felt sorry for the children, who were as if they had no father, yet all the time they had one. When the children came in from playing, the mothers gave them the flutes, and told them that that was what their father was playing on. They said, "Do as your father does. Blow in the flute, and learn to play." The children tried, almost succeeded, but failed. Then they went to sleep, and the women went off to make the bows and arrows. When the children got up, they went out on the side-hill, and saw a deer-track. They came home and told their mothers that they had seen a deer's track, and showed them how it looked, making similar tracks with their fingers. They said to the women, "That is the kind of foot the deer have that father kills. If we had bows and arrows, we could kill them too. If you will make us some bows and arrows, we will go hunting to-morrow." When they had said this, the mothers gave the children the bows and arrows they had made, and said, "Here is what your father uses to kill deer. He gets close up before he shoots. Don't go far away. It is a bad country, and you might get killed." When the children had gone, the mothers cried.

The two children had not gone far, before they came to a fawn's track. The younger said, "I'll look out for the trail, and do you watch for the deer." The younger of the children was the smarter. He said to the other, "When you see the deer, you had better let me shoot, for fear you might miss it." They followed the trail for a time, and then, looking across a canyon, they saw a fawn lying there asleep. The older child crept up, got close to it, shot it, and killed it. The children left it lying there, and went back and told their mothers. Then they all went back; and the mothers skinned the fawn, and cut it up, and brought it back to the camp, keeping the meat for the two children. The women were cleaning up the camp one day after this, and found a piece of flint which Lion had forgotten. By this time the two boys had learned to play the flute nearly as well as their father. From the flint the women made some large arrows, and gave them to the children. They went out, and with these arrows next day killed a bigger deer than before. This time they brought it home themselves. They said to each other, "Even if our father has left us, we can kill deer, and keep our mothers alive." The third time they went hunting, they went on and on till they reached a large mountain, where they separated. The younger said to the older, "If you go back down the ridge, kick the pine-needles about, so that I shall know that you have gone that way." Then they separated, and the younger killed a deer. He brought it back to where they had separated, and saw the pine-needles kicked about; and when he got home, he found that the other brother had also killed a deer. The mothers were very glad. When the two children came back, they began to play on their flutes, and now were able to play better than their father.

The next day they went out again, and sat on the top of a high mountain, to rest and look out over the country. Said one, "This is the mountain where father kills his deer, I think. I think we will do the same on the same mountain." The younger said, "When father kills a big deer, he always manages to get it home by the time the sun sets over the mountain. If you come to a big deer's track, follow it, and I will do the same. Don't pay any attention to me, I'll get home some time." The younger followed a deer, killed it, and, although it was a big one, he got home with it just at sundown. He brought it home at the time he said he would. The boys now saw that their father had a black bear's skin to sit on, and said to each other, "I wonder if we could not kill one of those animals too." So they went off to the west, as usual, to the same mountain. The younger said, "Our mothers' deer-skin blankets are nearly worn out. I wonder if we can't kill something to make a new pair." The other said, "We will kill deer again to-day, and carry them home, and think about the other things." That night Lion brought home a deer, and stood by his camp watching the two boys as they brought in their game. He had never done this before. Next day the younger said, "If we go off to-day, let us go another way:

let us go to the north, and try to get something for blankets." When they had gone about halfway up a large mountain, they stopped for a rest. The younger said, "Let us go down to the Padi'tim Yā'manmanto. Do you keep above, and I will go along lower down. We will keep the same distance apart. We shall get home some time." Each killed a black bear, and carried it home.

Lion was much interested in what the boys did now. He was watching them as they came back. That same night he came to their camp, sat down by the door, and lighted his pipe. He said, "If a man leaves his wife, after a while he can come back to her. That is what people will say about it by and by." Then he said to the boys, "In the morning you can go hunting. There are plenty of deer in the hills." They went off to the south, and Lion followed. When they reached the top of a mountain, he said, "There is a little valley down there." Then they all started for the valley; but before they got there, they stopped for a rest, and Lion took a smoke. When they got to the edge of the valley, Lion said, "Stop and look to see how many bears there are, and where they are." The two boys did so, and saw that the valley was full of bears. Lion said, "You two stay here, where there is an opening, and I will go down and scare the bears up." So the two staid there, while Lion went down into the valley. When he got there, the bears started to run the wrong way. Two bears began to chase him, and he ran back toward the boys, he ran between them; and when the bears came, the boys shot them, but did not kill them. The bears began to chase them, so they separated and ran all round the world. When they got to the end, they met, but kept on again till they came to the place where they started. When the two boys left, chased by the bears, Lion went back to the camp of his first wives. When the boys got back to the place they had started from, the bears came too, and fought each other. Each had been chasing one of the boys. They fought, and finally killed each other. Then the boys skinned them, and took the hides home. They staid there, and Lion staid there too.

ABSTRACTS.

1. *Creation Myth.*

In the beginning all was water. Turtle and Pehē'ipĕ float on it on a raft. Earth-Initiate comes down from the sky to the raft. Turtle dives and brings up mud from bottom. Of this, Earth-Initiate makes world. He calls Sun and Moon to rise, and makes the stars. Coyote and Rattlesnake come up out of the ground. Earth-Initiate makes animals; makes people out of earth, and vivifies them by sleeping and sweating beside them. Coyote attempts to imitate, but fails to make satisfactory people. Earth-Initiate wants people to live without work, and to be restored to life and youth in lake. Coyote wishes the opposite, and prevails. Earth-Initiate leaves the world and goes above. Coyote tells people to prepare for a "burning." In the races before the ceremony, Coyote's son is bitten by Rattlesnake and killed. Coyote in vain tries to get revoked his decision that men should die. Soon after this every couple suddenly speak a different language. Ku'ksū, the first man, talks all these languages, and gives to each couple the names for things, their laws, etc.; sends them to their homes. Then Ku'ksū, and his wife Morning-Star, go away. Coyote follows; finds Ku'ksū in spirit cave with Coyote's son; not allowed to enter or eat. Coyote returns home, kills himself, and goes back to cave; finds Ku'ksu and all gone above. Coyote goes off to the west.

2. *Earth-Namer.*

Coyote and Earth-Namer quarrel as to whether man shall have an easy and deathless life. Coyote prevails, and declares that man must work and die. Earth-Namer goes off angry. Coyote's son is killed by Rattlesnake. Coyote overtakes Earth-Namer, and tries in vain to have his own decision repealed. Earth-Namer travels over country, ridding it of evil beings; instructs Mink how to kill a great snake, and with its fat to kill the women who try to kill travellers by urinating on them; sharpens the bill of Crow, and causes Fish-Hawk to choke; escapes from and kills the two boys who kill persons while ferrying them across stream; kills their grandmother as well; scatters roots for people to eat; is chased by Grisly-Bear, who causes conflagration, from which Earth-Namer escapes by hiding under grass-roots; goes off far to east, and lives there yet.

3. The Conqueror.

Two old men live with their people in a large sweat-house. Many people are killed by a great bird when hunting, others by rattlesnakes when shooting ground-squirrels. Wood-Bugs kill many by dancing against people and knocking them about; others are killed by Man-Straightening-Old-Woman, who crushes them with a great rock; still others die as result of following trail of Elk. All the people that are left go with the old men to gamble. Some are killed in trying to swim river at certain spot; others fall and are killed on ice floor of house of host; others are killed by not being able to drink all the soup offered them. The two old men alone escape, and return to their daughter, whom they left at home. Daughter meets Cloud-Man, who marries her; gives her two bunches of feathers, which shall become boys. She puts them away. The boys, Always-eating and Conqueror, come out and surprise old men. They grow up rapidly. Conqueror overcomes all the beings who killed the people formerly; goes with the old men to gamble, as before; finds opponent has passage through his body, and thus cheats. Conqueror, with help of Sun, closes this passage, and opens one in his own body, thus winning all his people back, as well as all of his opponents. He then returns home with old men.

4. Kū'tsem yĕ'poni.

Old woman and man live together. She puts bead in basket, and this develops into a boy. He grows rapidly; shows great power and skill; kills bear which he thinks is a gopher; kills poisonous insects that try to overpower him; kills woodpeckers in a row on branch; kills Elk by aid of two magic arrows, with help and advice of handful of earth; meets Coyote and gives him food. Latter returns again and again in different guises to get more; finally is given yellow-jackets in the food, and is killed. Kū'tsem yĕ'poni goes with his grandfather to gamble with Old-North-Wind. Floor of house is of slippery snake-skin. Beginning to lose, he finds that opponent has passage through body. He closes this, and opens one in his own body, and thus wins. Kills the Man-Straightening-Old-Woman.

5. Search for Fire.

People formerly had fire, but it was stolen and carried off by Thunder. Deprived of fire, people cooked by having red-eyed bird look at meat. Lizard one day sees smoke of real fire, tells people, and all set out to get it. Arrived at house of Thunder, Mouse steals past the watcher, who is asleep, and enters house through smoke-hole; cuts strings of the skirts of Thunder's daughters; fills flute with fire, and escapes. All people run. Dog carries some fire in ear; deer on hock. Thunder and daughters pursue, with wind, rain, and hail. Skunk shoots Thunder, and daughters turn back. People get safely home.

6. Thunder and his Daughter.

Older of two brothers follows Thunder's daughter, who lures him away. He shoots arrow ahead of her, and secures it from her pack-basket unharmed; passes through a field of rose-bushes with aid of flint, which cuts path for him; follows her through field of rattlesnakes, which he passes by aid of red-hot stone moccasins; camps and sleeps with her, cutting off the rattlesnake-teeth that surround her vagina; crosses frozen lake by aid of red-hot stone moccasins; fords deep river with help of duck-feather; escapes by aid of same from Valley-of-Death-by-Old-Age; enters house of Thunder; survives poisoned food; breaks pitch-log for fire-wood; spears great fish that nearly pulls him under water; is aided by the water-ousels; goes to hunt deer, but finds grisly bears; escapes from these to swaying ice-tree. Bear stays below to kill him. He shoots bear in only vulnerable spot, the left hind-foot; returns to Thunder's house, takes daughter, and goes home.

7. The Loon-Woman.

Loon and Eagle live with many brothers in great sweat-house. Loon falls in love with Wood-Bug, one of her brothers. She calls him to come out of house, but all others are sent first. She attempts to burn house by magic. Wood-Bug at last comes, and is carried off by Loon. Loon tries to make Wood-Bug her husband, but by a ruse he escapes and rejoins people at house. Spider makes a net and carries all others up to sky, away from burning house. Lizard is at bottom of net. He makes a hole to peep through, and net tears, letting all fall down into burning house. Their hearts burst and fly out. Loon tries to catch them in a scoop, but misses many. She finally goes off, wearing all she catches as a necklace. Eagle alone was not in net, and so escapes. She finds Loon on the lake and with water-ousels, shoots Loon and kills her; throws hearts into water, and thus restores brothers to life. Two hearts are missing, Wood-Bug and Fisher. Two girls find these far away, embedded in ground. Their tears have made a salt-lick. The girls carry hearts home, restore them to life, and marry the men. Eagle goes back to where all lived before.

8. Sun and Moon.

1. Sun lives in north; steals children of Frog. Frog is pursued. Sun causes patch of willows to grow, that Frog stops to pick. Frog finally catches up to Sun just as latter enters ice-house. Frog gets to smoke-hole, and, when Sun comes out, swallows her. Sun swells and bursts Frog. Sun and brother then dispute as to which shall travel by night. Sun tries it, but stars fall in love with her: so brother travels by night, and Sun goes by day.

2. Sun and Moon are sister and brother; live in stone house far to east; do not rise at first. Many animals go to try to make them rise. All fail. Finally Angle-Worm and Gopher go. Former bores tiny hole down outside, and then up into house. Gopher follows with bag of fleas; sets fleas free. Sun and Moon are badly bitten; cannot stand it, and run out. Sun is afraid to travel by night; so brother goes at night, and she goes by day.

9. Bear and Deer.

1. Bear and Deer live together. Bear kills Deer; and children of Deer, in revenge, suffocate Bear's children in sweat-bath. Deer run away. Bear finds her children dead; calls the Deer, but they have shot berries about, which answer for them. Bear is misled by this, but finally finds trail, and pursues. Deer get on a rock that stretches till very tall. Bear asks how to get up. They tell her to open mouth and shut eyes. Bear does so, and children throw hot rock into mouth and kill her. Deer run farther; are helped across river on leg of Shitepoke. Bear comes to, and asks to be allowed to cross in same way, is thrown off in mid-stream, and drowned.

2. Deer and Bear are neighbors. Bear kills Deer while pretending to louse her. Children learn of this through life-token. They kill Bear's children in revenge, throw berries about, and run away. Bear comes home; finds her children dead; calls Deer's children, but berries answer for them. Bear finally finds the trail, and pursues. Deer get on rock that stretches. Bear tries to climb, but is killed by hot rock dropped into mouth.

3. Bear kills Deer while pretending to louse her. Deer children find this out, kill Bear's child in revenge, and escape to tall rock; cross stream, and kill Bear by throwing hot rock into mouth as she swims across. The two children are then taken up into sky by Spider; find their mother there, but she is drowned while getting water for them.

10. Coyote Tales.

1. Porcupine kills Elk, but has no knife to skin him with. Coyote offers to lend him his for a quarter of the Elk. When Elk is skinned,

Coyote proposes a jumping contest to see who shall have the whole; Porcupine refuses. Coyote suggests wrestling; Porcupine refuses. Coyote suggests race, but Porcupine refuses, finally agrees to jump over body of Elk. Coyote jumps, but Porcupine causes body of Elk to rise, and Coyote barely gets over. Porcupine then jumps over easily and wins. Coyote, however, steals half the meat while Porcupine is not looking, and runs away.

2. Coyote meets Snow-Hunter. Latter proposes that their dogs fight. Coyote asks advice of his excrement. The second time he is told he will win. The dogs therefore fight, and Coyote's small dog kills Snow-Hunter's large one. Coyote then fights with Snow-Hunter and kills him.

3. Coyote hears some one call, and answers against his grandmother's wish. The caller comes near, and Coyote buries his grandmother to prevent any harm coming to her; asks advice of his excrement, and is told the second time that he will overcome the stranger; must cover his belly with pitch. The stranger proves to be Snow-Hunter. He proposes that each cut off and eat the fat from the other's entrails. Coyote agrees. Snow-Hunter cuts off the pitch from Coyote, thinking it fat. He eats it. Coyote then pretends to cut off fat from Snow-Hunter, but rips him open and kills him; digs up his grandmother, and both continue to live as before.

4. People want to kill all the Coyotes; kill all but one, and then catch him, and put him in a split tree. Tree is hollow, and Coyote is not killed. Woodpecker makes small hole in tree. Coyote asks excrement how to get out, and is told, the second time, that he must transform himself into mist, and pass out of the hole. He does so, returning to his natural shape afterwards. He is again caught by the people, and this time put on an island in a great lake far to the west. He asks advice, as usual, and is told to walk to land on the fog as it rises in the morning. He does so, and returns to former home; declares he cannot be killed, that he will come to life wherever he has urinated. People give up trying to kill him.

5. Coyote meets a man fishing; asks for some fish; is told to go upstream and build fire; returns for fish, but is told to go higher up and build fire. This is repeated several times. Coyote gets angry, and jumps at the man, who turns, and Coyote lands on bag of fish-hooks that catch his feet. He tears himself loose and runs away.

6. Coyote marries Deer. She grows lazy and makes Coyote fetch water. He gets angry, and throws his wife out of smoke-hole. She returns to her father, but her robe is caught on smoke-hole. Coyote calls to her; gets no reply; gives robe a pull, thinking to pull wife into fire; falls over himself into fire, and is burned.

7. Coyote transforms himself into a woman, and asks many women to a feast at his house. While all are asleep, Coyote returns to his regular form, cohabits with the women, and runs away. The

women wake in the morning to find house has disappeared, and that all have children.

8. Coyote hears a woman singing, and follows the sound; spends night in hollow tree, which closes. Woodpecker makes small hole, but is scared away by Coyote, who cannot keep still; asks advice of his excrement, and is told as usual. He follows advice, and turns himself into a fog, thus passing out of the small hole; follows the song he hears, and finds woman at last on an island in the Sacramento Valley. He cannot reach her, so comes home.

9. Coyote asks Humming-Birds how he may be able to fly as they do. By their advice he climbs tree, and jumps off, but is dashed to pieces before he can say the necessary charm. Crows begin to eat his eyes, and he comes to. He eats crickets, but they escape through a rent in his body, which has completely dried up.

10. Animals go in search of fire, and run off with it. Coyote gets chance to carry it, although he has been sent away to be out of mischief. He drops it, and a general conflagration ensues. Coyote asks rocks, lakes, and trees for aid, but all either burn or grow hot. He cannot wait longer, so crawls into hollow tree, and is burned up.

11. Coyote makes fun of his sister-in-law, Bear. She gets angry, and bites him. He cannot be killed as long as the little finger of his right hand is intact. When Bear begins to bite that, Coyote kills her; tells his wife that Bear died naturally. At the "burning" Coyote gets into a quarrel with the Bears, and is killed.

12. Coyote wants to be as black as Blackbirds. The latter tell him he can become so by getting into a hole where hot fire has been kept. He does so, they cover him up, and he is roasted to death.

13. Coyote desires a fine shell like Turtle's. He is told to fall from a high tree on to flint arrow-points set up in the ground beneath. He does so, and is killed.

14. Coyote tries to imitate a leaf floating in air. He climbs high tree, jumps off, and is killed.

15. Coyote sees Frogs diving; tries to imitate them, strikes his head on a stone under water, and is killed.

16. Coyote arranges a race to determine where the different people shall live. The winners are to have the valleys, the vanquished must take the hills. After the race all people are to be animals. Jack-Rabbit wins, and therefore lives in the valleys, while all the other animals live in the hills.

11. Fish-Hawk and the two Deer-Ticks.

Two Deer-Ticks live with their brother, Fish-Hawk. He gives them only the poorest food, and finally none at all. The Deer-Ticks decide to try to help themselves. They get a piece of flint; watch a deer-trail, and persuade a deer to carry them with him on his neck. They then cut the deer's throat and kill it. Fish-Hawk's wife helps them carry meat home, and feeds them with it secretly. Fish-Hawk discovers this, and snatches away the last morsel. He then becomes Fish-Hawk, and the two brothers become Deer-Ticks.

12. The To'lowim Woman and the Butterfly-Man.

A woman goes out with her child to gather food; sees a butterfly, and chases it; leaves child behind, and forgets about it; chases Butterfly-Man, who marries her. They pass through valley in which are many other Butterfly-Men, and woman lets go her husband and tries to catch another. She fails, and goes crazy. She dies in the valley without being able to get out.

13. Mountain-Lion, Robin, and Frog-Woman.

Mountain-Lion marries Robin. They separate, and each goes home alone. Robin is swallowed by Frog, who takes Robin's child and goes to Lion's home. Latter suspects that all is not right; refuses to have anything to do with his wife; sets her to roasting grain over hot fire, till she is killed; cuts her open and finds Robin inside; restores her to life by placing her in lake over night.

14. The Cannibal-Head.

Man dreams he ate himself up; goes out to pick pine-nuts. Son throws one down and wounds man. He licks off blood, likes the taste, and eats himself all but head and shoulders. He then goes bouncing about, trying to kill people. He finally bounces into the river, and is not seen any more.

15. The Stolen Brother.

One of two brothers is stolen by a great bird. The other brother learns from the Moon where the missing one is. With help of Lark, Eagle, and Bald-Eagle, he goes to the place where his brother is. Lark kills the abductor, and the two eagles bring back the two brothers.

16. Lizard and Grisly-Bear.

Grisly-Bear had killed all people but Lizard and his grandmother. Lizard sees Bear dancing in the valley, and calls him names. Bear hears, and hunts for Lizard; finds him finally, and tells him he will have to be killed. Lizard, however, jumps down Bear's throat without being harmed, and cuts him to pieces inside with a flint which he had concealed.

17. Skunk and Beetle.

Skunk and Beetle go to get reeds for arrows. They are attacked by enemies. Beetle exhausts his supply of bad odor by shooting at them. Skunk then shoots and kills all.

18. Wolf makes the Snow Cold.

Wolf and his grandchildren live in large house. The children disturb him by playing and shouting in the snow. He goes outside, and urinates on the snow, which is thus made cold. The children then get their hands and feet cold, and do not play and shout as before.

19. Thunder and his Daughter.

Thunder's daughter wants to marry Flute-Player. Thunder forbids her. She goes to meet Flute-Player, however. Thunder gets angry, but in contest of power is overcome by his daughter. She kills him, and marries Flute-Player.

20. Huptoli.

A one-legged being was once found in the river. Carried up to the top of the hill, he jumps back to the river in one jump, and is not seen again. All the people fall into deep sleep, and are awakened only by the shaman.

21. Big-Belly's Son.

Big-Belly and wife are killed by enemy, who surprise them. Son comes home from hunt, and finds parents dead; cuts out girl from body of mother, and takes it off with him to mountains; feeds it on pounded meat, and it grows rapidly; finds Frog-Woman at his house one day on returning from hunt. She scalps him in night, and runs away. He collects wood and builds a great fire; leaves food with baby-sister, and tells her to burn herself if life-token he leaves with her should fall. He goes off to the country of the Frog-Woman to get back his scalp; makes himself look like a woman; finds the place where the people are dancing about his scalp. At night he steals it, and returns home; finds his sister alive. To see whether she would have carried out his orders, he tells the life-token to fall. It does so, and the child prepares to burn herself. Brother stops her in time. They live together as before.

22. *Mountain-Lion and his Wives.*

Mountain-Lion marries two women, and has a child by each. Deserts them for two other women. Children and mothers nearly starve. Mothers make flutes for children, and also bows and arrows. The children learn to kill deer, and play on the flute. They gradually become expert at both. Their father begins to get interested in them, watches them. Finally he returns to his first wives, and he and the children go hunting together.

III.—THE NORTHERN MAIDU.

By Roland B. Dixon.

Plates XXXVIII–XLIX.

CONTENTS.

PAGE

INTRODUCTION 121

BIBLIOGRAPHY 122

Geography and History 123

Habitat and Boundaries 123

Topography 125

Divisions 127

History 129

Population 130

Migration 132

Material Culture 132

Manufactures 132

Work in Stone 132

Work in Wood, Bone, and Shell 139

Preparation of Hides 141

Cordage and Netting 142

Basketry and Weaving 145

Work in Feathers 149

Clothing and Personal Adornment 154

Dwellings and Household Utensils 168

Food and its Preparation 181

Hunting and Fishing 192

Transportation and Trade 198

Warfare 202

Games and Amusements 207

Calendar 217

Art 218

Decorative Art 218

Music 221

Social Organization, Law, and Festivals 223

Social Organization 223

Crimes and Punishments 227

Social Gatherings and Festivals 228

Birth, Puberty, Marriage, and Death 228

Birth 228

Names 230

Puberty 232

Marriage 239

Death and Burial 241

PAGE
Religion.......... 259
  Beliefs regarding the Soul, etc.......... 259
  Conceptions of the World.......... 262
  Miscellaneous Beliefs.......... 265
  Charms.......... 266
  Shamanism.......... 267
  Ceremonials and Dances.......... 283
  The Secret Society.......... 322
Mythology.......... 333
Conclusion.......... 343

INTRODUCTION.

THE present paper embodies a portion of the results of the work of the Huntington Expedition during the summers of 1899, 1900, 1902, and 1903. The whole of the first season, and considerable parts of the following seasons, were spent with the various fragments of the Northern Maidu, and the general ethnological results of that work are here presented. The linguistic material, of which a considerable mass has been obtained, is being prepared for publication as rapidly as possible.

In the work among the Maidu of the foot-hill and lower Sierra region in the vicinity of Mooretown, Butte County, the writer was greatly aided by Mr. D. L. Spencer of Enterprise. Owing to his long residence in the region, and his sympathetic study of the Indians of the vicinity, Mr. Spencer was able to render valuable service in many ways; and for the description of the "burning," and many of the details of the ceremonial and daily life of this portion of the Maidu, the writer has relied largely on him. A number, also, of the specimens illustrated, in particular the images used at the "burnings," were obtained only through Mr. Spencer's diligent and persistent endeavors. Further notes on the "burning" in 1904, containing additional important details, were made by Mr. S. A. Barrett of Ukiah. Much aid in the work among the Maidu was given by Dr. A. M. Tozzer during the summer of 1900, chiefly in connection with the southern portion of the stock. The work of the expedition during the first and part of the second seasons was also greatly facilitated by the many courtesies extended by Mr. H. F. Liston, superintendent of the Round Valley Reservation. The identification of the food and other plants mentioned in the course of the paper was kindly undertaken by Mr. M. L. Fernald of the Gray Herbarium, Harvard University. In many instances, however, the specimens were so imperfect (having been largely collected by Indians) that identification was impossible.

BIBLIOGRAPHY.

With the exception of Powers's "Indians of California," the Maidu have been but briefly described. The following is a list of the more important references to this stock.

ABBOT, H. L. Pacific R.R. Survey, Vol. VI, p. 58.

BUFFUM, E. G. Six Months in the Gold-Mines (London, 1850), pp. 40–51.

DIXON, R. B. Basketry Designs of the Maidu Indians of California (American Anthropologist, N. S., Vol. II, p. 266).

DIXON, R. B. Some Coyote Stories from the Maidu Indians of California (Journal American Folk-Lore, Vol. XIII, p. 267).

DIXON, R. B. Basketry Designs of the Maidu Indians of Northern California (Bulletin American Museum of Natural History, Vol. XVII, p. 1).

DIXON, R. B. Maidu Myths (Bulletin American Museum of Natural History, Vol. XVII, p. 33).

DIXON, R. B., and KROEBER, A. L. The Native Languages of California (American Anthropologist, N. S., Vol. V, p. 1).

FRÉMONT, J. C. Report of an Exploring Expedition to Oregon and Northern California (Washington, 1845), pp. 241 et seq.

JOHNSTON, A. Report on the Indians of the Sacramento River and the Sierra Nevada (Report Commissioner of Indian Affairs, 1850, pp. 122 et seq., 31st Cong., 2d Sess., Sen. Ex. Doc., Vol. I).

MILLER, L. Der Untergang der Maidu (Globus, Vol. LXXII, No. 7).

MILLER, M. L. The So-called California "Diggers" (Popular Science Monthly, Vol. L, p. 201).

TASSIN, A. G. The Concow Indians (Overland Monthly, N. S., Vol. IV, p. 7).

TASSIN, A. G. Unkoito; the Saviour. A Legend of the Concow Tribe (Overland Monthly, N. S., Vol. IV, p. 141).

TASSIN, A. G. Chronicles of Camp Wright (Overland Monthly, N. S., Vol. X, pp. 23, 169, 259, 365, 479).

WOZENCRAFT, O. M. Report on the Indians of California (Report Commissioner of Indian Affairs, 1851–52, 32d Cong., 1st Sess., Sen. Ex. Doc., Vol. III).

Hutching's California Magazine, Vol. III, p. 322.

California Farmer, *passim* and particularly Oct. 26, Nov. 2, 1860.

History of Amador County (Oakland, 1881).

History of Butte County (San Francisco, 1882).

History of Yuba County (Oakland, 1879), pp. 24–28.

Geography and History.

The Indians described in the following pages lack, in common with many of those of the Pacific slope, any collective name in common use for themselves as a group or stock. From the very beginning they have been known by the vague and meaningless name of "Diggers," a term first applied to various bands of the Shoshone of the Great Basin area, and later extended to cover a large proportion of all the Indians of California. In the earlier reports of the commissioner of Indian affairs, members of this stock were spoken of in geographical terms largely. With the publication of Stephen Powers's "Tribes of California" in 1877, the first rational name was proposed and used. Finding that any tribal or stock name was wanting, he used for these Indians the term "Meidoo" or "Maidu," the word in their language meaning "Indian" or "man." Later Powell, in his "Indian Linguistic Families," following the principle of priority, discarded Powers's term in favor of "Pujunan," derived from the name of an insignificant village formerly existing near Sacramento. In view, however, of the unimportance of this small settlement, and the more rational character of the term proposed and used by Powers, it seems better to adhere to the name "Maidu," giving it, however, a somewhat greater extension than Powers by including his so-called "Nishinam," in reality merely a section of the Maidu. The language spoken by the Maidu is distinct from all others, and they therefore constitute a stock by themselves.

To the surrounding tribes the Maidu are known by a variety of names. By the Hat Creek Indians (a branch of the Achomā'wi) they are called "Tikisuī'ī;" and by the rest of the Achomā'wi, "PaQā'mali." To the Yana they were known as "Patcamī'sa" or "Wawā'ltupāā." Their Shoshone, Washo, Moquelumnan, and Wintun names are not yet known.

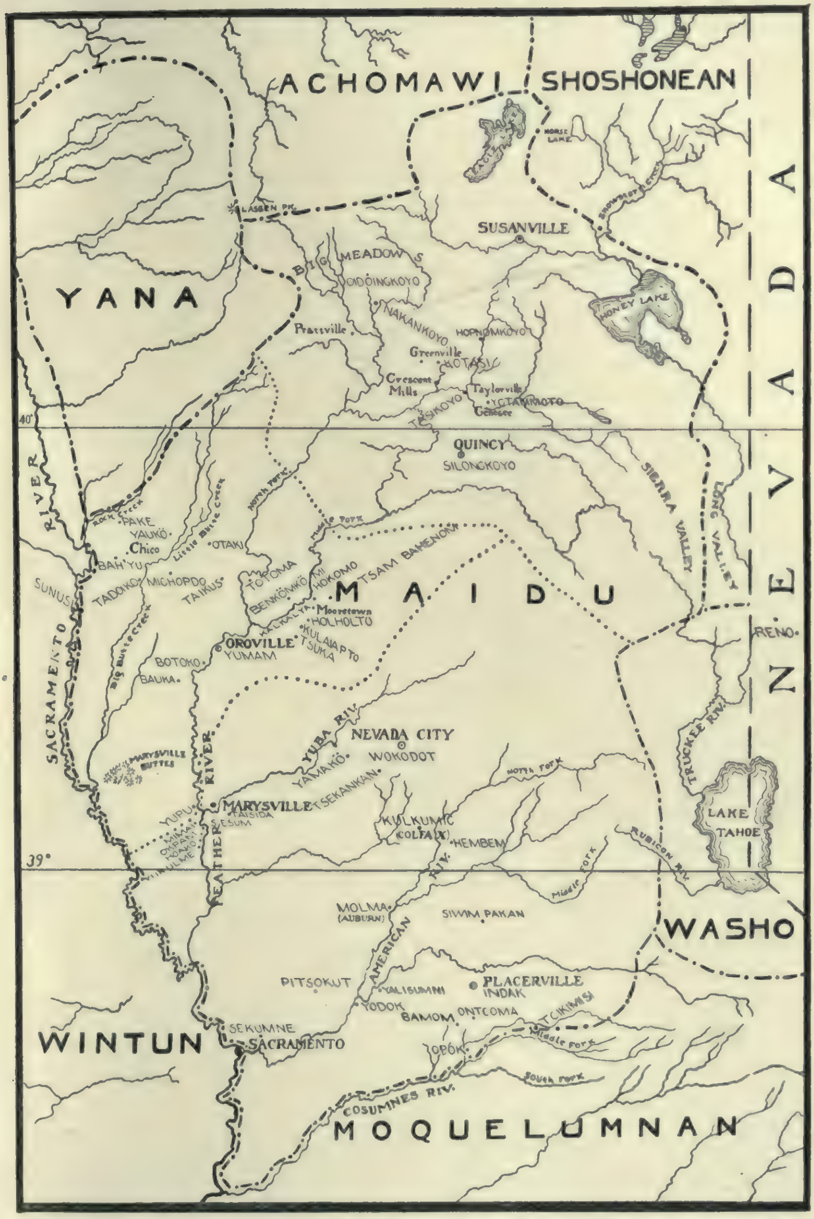
Habitat and Boundaries.—The region occupied by the Maidu lies in the northeastern part of California, and comprises, in whole or in part, the counties of Lassen, Plumas, Butte, Sierra, Yuba, Sutter, Nevada, Placer, El Dorado, and Sacramento. On the north they were in contact with the Yana and Achomā'wi (Pit River and Hat Creek Indians), on the east with the Shoshone and Washo, on the south with the Moquelumnan, and on the west with the Wintun.[1] In more detail the boundary of the region occupied was as follows: Beginning at a point on the Sacramento River some six or eight miles north of Chico, the northern boundary of the stock seems to have followed the course of Rock Creek eastward to its source, and thence approximately along the present county-line between Tehama and Butte, and Tehama and Plumas, as far as Lassen Butte.[2] The region drained by the upper waters of Deer, Mill, and Battle Creeks, although really a continuation of Big Meadows, was not occupied by the Maidu, but lay within the dominion of the much-dreaded Ko'mbō or Yana. The immediate region of Lassen Butte and the upper valley of Warner Creek were rarely visited by the Maidu, as, owing to the prevalence of hot-springs and other volcanic features, the region was regarded as mysterious. From Lassen Peak eastwards, the line between the Achomā'wi and the Maidu seems to have been rather vague. The region of small lakes, cinder-cones, and lava-flows immediately east of the peak was apparently regarded as Maidu territory. The whole valley of Susan Creek was also within their control, although permanent settlements did not exist far above the present town of Susanville. Pine Creek and Eagle Lake were continually visited by hunting-parties, and were somewhat doubtfully regarded as also a part of Maidu territory. Beyond Willow Creek, however, they never ventured. The entire valley of Honey Lake is said to have been permanently occupied in early times by the Maidu; and it is declared emphatically that no Piutes were settled there until after the coming of the first white immigrants, or just before.[3]

---

[1] See map, Plate XXXVIII.

[2] This agrees in general with the boundary of the land ceded by the Maidu in this vicinity in the treaty of Aug. 1, 1851 (see Royce, Indian Land Cessions, Plate 7, in the Report of the Bureau of Ethnology, 1896–97, Part 2).

[3] According to the map given by Royce in his Indian Land Cessions, the Washo claimed all the valley of Honey Lake and its tributaries, except Susan Creek, and extended up the latter as far as Susanville. Recent or detailed information as to the earlier Washo territory is lacking. The Maidu assert very definitely, however, that Honey Lake was in their control, although names of village sites in that area were not given.


ACHOMAWI
SHOSHONEAN
EAGLE
HORSE LAKE
LASSEN PK.
SUSANVILLE
BIG MEADOWS
OIDOINGKOYO
YANA
NAKANKOYO
HOPNOMKOYO
Prattville
Greenville
KOTASI
Crescent Mills
Taylorville
YCTAMKOTO
Genesee
TASIKOYO
HONEY LAKE
NEVADA
40°
QUINCY
SILONGKOYO
SIERRA VALLEY
LONG VALLEY
RIVER
Rock Creek
PAKE
YAUKÖ
Chico
Little Butte Creek
OTAKI
North Fork
Middle Fork
BAH'YU
SUNUSI
TADOIKO
MICHOPDO
TAIKUS
TOTOMA
BENKÖMKÖ
HOKOMO
TSAM BAHENOM
MAIDU
KALKALYA
Mooretown
HOLHOLTO
KULAIAPTO
TSUKA
OROVILLE
YUMAM
Big Butte Creek
BOTOKO
BAUKA
SACRAMENTO
RENO
MARYSVILLE BUTTES
RIVER
YUBA RIV.
NEVADA CITY
WOKODOT
YAMAKÖ
SEKANKAN
MARYSVILLE
TAISIDA
ESUM
YUPU
MIMAL
OKPAKI
HOAKO
YUKULME
FEATHER
KULKUMIC
(COLFAX)
HEMBEM
North Fork
TRUCKEE RIV.
LAKE TAHOE
RUBICON RIV.
39°
Middle Fork
MOLMA
(AUBURN)
SIWIM PAKAN
AMERICAN RIV.
WASHO
PITSOKUT
PLACERVILLE
INDAK
YALISUMNI
YODOK
BAMOM
ONTCOMA
TCIKIMISI
Middle Fork
WINTUN
SEKUMNE
SACRAMENTO
OPOK
South Fork
COSUMNES RIV.
MOQUELUMNAN

MAP SHOWING THE LOCATION AND SUBDIVISIONS OF THE MAIDU INDIANS AND SURROUNDING TRIBES AND THE PRINCIPAL VILLAGES OF THE MAIDU.

Statute Miles
0 10 20 30

Whether the Maidu occupied any part of upper Long Valley is very uncertain. From the fact, however, that Reno and the region thereabouts are mentioned in the creation myth, it is possible that the Maidu at one time extended farther in this direction.

Although Sierra Valley was not permanently occupied by the Maidu or other Indians because of the heavy snows in winter, it seems to have been regarded as distinctly Maidu territory. The Washo occasionally sent strong hunting-parties there, however. From the southern end of Sierra Valley, the boundary would seem to have run nearly due south, following along or just west of the crest of the Sierras as far as the South Fork of the American River. From here it turned more to the southwest, crossed the head of the North Fork of the Cosumnes to the Middle Fork, and continued down this stream to the forks. It is probable that from here the line followed the main river to its junction with the Moquelumne, and thence westward to the Sacramento. From this point the latter river formed in general the western boundary of the stock as far as the mouth of Rock Creek, just north of Chico.[1]

TOPOGRAPHY.—The area just outlined divides itself topographically into several sharply differentiated portions. The entire western section lies within the broad, flat Sacramento Valley,—a great plain a hundred and fifty miles or more in length, and from twenty to forty in width. This plain presents in general an almost absolutely level surface, broken only by the isolated volcanic mass of the Marysville Buttes, which stand approximately in its centre. Immediately along the Sacramento River is a stretch characterized by tule swamps, or low-lying lands liable to flood, and hence unsuited for habitation Thus most all permanent settlements were situated a few miles back from the river, on slightly higher land. The climate of this region is one of long, dry, and often very hot summers (temperatures of 40° to 45°C. or even higher being not uncommon), with a mild and sometimes rainy winter. In its original state, the whole region seems to have been almost park-like, with its miles on miles of waving grass and flowers, and its magnificent open groves of oaks, and to have been fairly thronged with game, while its rivers teemed with salmon and other fish.

---

[1] Earlier statements and several maps give the Wintun quite a strip of land on the eastern side of the Sacramento. By the treaty of Sept. 9, 1851, the Wintun apparently claimed a belt from six to twelve miles wide on this eastern side, from just below Chico to the mouth of the Feather River. Powers (Tribes of California, p. 218) also speaks of the Wintun as overlapping the Sacramento in this region. Recent careful inquiry, however, shows, that while there would seem to have been no Maidu villages on Butte Creek much below Durham, there were, on the other hand, several between Butte Creek and the Feather River, and also on the western side of the latter stream to its mouth. From what could be learned, the Marysville Buttes and the region between Butte Creek and the Sacramento was more or less frequented by both Wintun and Maidu, both claiming it, but the Maidu seeming to have been in the ascendant.

Eastward from this rich valley lies the long chain of the Sierra Nevada, which, rising gradually from its western foothills, reaches an elevation of from twenty-three hundred to thirty-three hundred metres, along its eastern crest. This whole mountain region is very rugged, being, with the exception of a small part in the northeast to be referred to presently, deeply cut by the canyons of the Feather, Yuba, and American Rivers. These canyons vary in depth from three hundred to twelve hundred metres, and run in general northeast and southwest, dividing the country into a series of roughly parallel ridges, rendering travel at right angles to their trend often quite difficult. In its climate, this region varies notably as we go from west to east, for, with the increasing elevation, we pass from a somewhat arid to a less arid climate, and from a region of mild winters to one in which the winter is often of very considerable severity, and where the snowfall is probably as great as that in any other part of the United States, if not greater. The distribution of this heavy snowfall is not in exact accord with elevation, for the heaviest snow occurs in "belts," and, here reaching depths of from ten to twenty feet, serves to render permanent occupation almost impossible. Compared with the region of the Sacramento Valley, the forest in this section is quite dense; and while oaks are found in large numbers, yet the prevailing timber is coniferous. Game would seem to have been plentiful here in early times; and the rivers, on the whole, were well supplied with fish.

Extending from north to south in a more or less connected chain in the northern portion of this mountain area, is a series of large, perfectly flat-floored valleys, lying at an elevation of from twelve hundred to sixteen hundred metres. These valleys, beginning with Big Meadows in the north, and continuing through American, Indian, Genesee, and Red Clover Valleys to Sierra Valley in the south, are often of considerable size (the larger from twelve to fifteen kilometres wide and from twenty to twenty-five kilometres long), and combine a level, easily traversable country, such as that of the Sacramento Valley, with a high mountain environment and climate.

The valleys of Honey Lake and its tributaries, lying to the east and northeast of the region just described, present a sharp contrast again to any of the preceding sections. We here come to the typical sagebrush and alkali plains, and barren, treeless ridges characteristic of the Great Basin area. Arid, with cold winters and hot summers, and with but a meagre supply of game, this last section is distinctly the least favorable and desirable of the whole area which the Maidu occupied.

DIVISIONS.—Linguistically and also culturally the Maidu are divided into three groups or divisions, in part coinciding with the topographic areas just outlined. These three sections of the Maidu may be called the Northeastern, the Northwestern, and the Southern.

The first of these occupies exclusively the chain of high mountain-valleys already described, and also the arid region to the east and northeast. Besides the main valleys mentioned, this section of the Maidu occupied Butt and Humbug Valleys just west of Big Meadows, and also held Mohawk Valley as a hunting-ground, the snowfall being too heavy there for a permanent residence. The western limit of this section was about three to ten miles east of the present line between Butte and Plumas Counties. It seems that on the whole they had comparatively little close association with the Northwestern Maidu, to whom they were known collectively as Nō′tōma ("Northern or Eastern people"), and came in contact with them only on summer hunts, when the two divisions often met, and sometimes fought. The differences between the two sections were noticeable both in language and culture. The dialects were, however, sufficiently alike to enable each to understand partially the speech of the other, although considerable variation, both in vocabulary and in grammar, existed. Culturally the Northeastern Maidu were simpler than their neighbors to the west, lacking in particular the elaborate dance organization, the Secret Society, and several features of the "burning" ceremony so characteristic of the northwestern section.

The second division of the Maidu includes all the remainder of the stock living west of the above, and north of the Yuba River. One portion, therefore, of this section, occupied the eastern portion of the Sacramento Valley in this region, whereas the other was located in the foot-hills and western slopes of the Sierra. While variations in culture existed within this section, linguistically they may be regarded as one group. The foot-hill people in this section were known to the Northeastern Maidu as Tā′yima ("Western people"), and to the dwellers in the Sacramento Valley as Tö′köma ("Cradle people [?], Flea people [?]").

All of the Maidu living south of the Yuba, whether in the mountains or in the Sacramento Valley, fall into the third division, which corresponds to the Nishinam of Powers. They differ in language from both the other sections, showing apparently somewhat simpler and abbreviated forms grammatically, and differ also considerably in vocabulary. In culture, again, they differ notably, approximating more and more the type of the Moquelumnan peoples to the south. By both the Northeastern and Northwestern Maidu these Southern Maidu are called Tan′köma (meaning unknown). The numbers of this section still surviving seem to be smaller than in the other divisions, and as yet information in regard to them has not been obtained as fully as with regard to the two other groups. The present paper is therefore devoted almost entirely to these latter sections. It is hoped to treat the Southern Maidu by themselves in a subsequent paper.

The number of villages at one time occupied by the Maidu seems to have been large. It is probably impossible at the present time to secure a complete list, and the information obtained in this particular is more exhaustive in some regions than in others. The map shown on Plate XXXVIII, however, gives most of the more important of these villages.

History.—Apparently the earliest meeting between Europeans and members of the Maidu stock of which there is definite record was in 1811, when Padre Abella made an exploring expedition through the lower San Joaquin and Sacramento Valleys. About ten years later the valley of the Sacramento was more carefully and thoroughly explored by Don Luis Argüello. His course seems, however, to have been entirely along the western bank of the river. In 1822 the Bear and Feather Rivers were explored by Spaniards, but only in their lower courses. As early as 1820, or possibly even earlier, the hardy and venturous trappers of the fur companies had found their way from the east and north into California, and unlike the Spaniards, who did not penetrate the mountains to any extent, had in ten years explored much, if not all, of the area occupied by the Maidu. During the decade from 1830 to 1840, in addition to the activity of the fur-traders, there were other visitors to the Maidu country, among whom were Ogden (1830), Bonneville (1832), Laframboise (1832), and Sutter, who started his settlement at New Helvetia in 1839. From the year 1840 up to the time of the discovery of gold in 1848, exploring-parties (such as Frémont's expedition in 1844), and immigrants began to penetrate the region, and settlements were started in the valley of the Bear River.

The tremendous and sudden influx of white population, due to the gold-fever, brought a rapid change to the whole Maidu country, which included within it a large part of the mining district. Party after party traversed their territory, along the Feather and American Rivers, and prospectors penetrated the most remote canyons and valleys in search of the precious metal. With some exceptions, the Maidu accepted rather passively this invasion of their territory, with the attendant driving-away of the game, and the destruction of the fish in the streams by the mining refuse. The sudden contact with the civilization of the mining camps quickly produced its usual effect; and by drink and disease the once populous villages were rapidly depleted.[1] In not a few instances this speedy decimation was accelerated by wanton slaughter of inoffensive and defenceless Indians by the more lawless members of the mining community. The rapidly diminishing remnants, however, stood in the way of the desired development of the region; and early in 1851 treaties were made by which the Maidu gave up all claim to their territory, and were transferred, so far as possible, to reservations established in western Amador, Nevada, and Butte Counties. Six years later some five hundred Maidu, chiefly from the Yuba and Feather Rivers, were taken to the then recently established Nome Lackee and Nome Cult (Round Valley) Reservations in the Coast Range. The majority of the Maidu escaped in the course of the next two years, however, and found their way back to their old homes. In the late '50's and early '60's a desultory warfare was waged by State troops on the Maidu, with the result that their numbers were still further reduced. Except for the brief period during which the reservations in Butte, Nevada, and Amador Counties existed, and while the small body above referred to were kept at Nome Lackee and Nome Cult, the Maidu have not been "reservation Indians;" and except for the small band, chiefly from Concow Valley and the immediate vicinity, who are now at Round Valley, the Maidu are to-day scattered over the whole area of their former territory. To the majority, allotments of land have been made; but there are many who still have no land, or have been allotted such poor land that they cannot live upon it. Others, still, are located on land given by private generosity, as at Chico.

POPULATION. — It is very difficult to arrive at any satisfactory conclusions as to the numbers of the Maidu before the period of the discovery of gold. Warner, a member of the Ewing Young trapping-party that traversed the Sacramento

---

[1] The population had, however, been much reduced before the immigrant days of '49, as in 1833, and at several other periods even earlier, very disastrous epidemics swept through the whole area.

Valley in 1832 and 1833, speaks of the region as "studded with villages."[1] Ridiculous estimates were made by some early visitors, as, for example, when Jedediah Smith estimated the number of Indians between Red Bluff and the mouth of the Sacramento, in 1820 or thereabouts, at over 80,000. In 1843 another observer estimated them at 50,000. It is unquestionable that the number of inhabitants in the whole Great Valley area decreased very largely in the period between 1820 and 1840, as the result of recurring epidemics of small-pox and other contagious diseases, which swept off the people by hundreds, if not by thousands. Several observers speak of finding entire villages almost entirely depopulated, and hundreds of skeletons lying about unburied. The only available figures of official estimates after the acquisition of California by the United States, as well as the census returns since then, are very fluctuating and not reliable. In 1850 Adam Johnston[2] estimated the Maidu in the Sacramento Valley and lower foot-hills as between 1300 and 1400; six years later, Henley[3] estimated that there were over 7000 in the whole area occupied by the stock; in the census of 1860 the number of "civilized Indians" in Maidu territory was given as 510, and in 1870 as only 95; in 1880 the figures jump to 1484; in 1890 the population is given as 1202, and in 1900 as about 1100. The estimate of Henley is certainly excessive, and the figures from the census of 1860 and 1870 are equally useless. It appears from a personal rough enumeration that the more recent census figures are again excessive, and it is believed that the number of full-blood Maidu to-day is not much over 200 or 250, at the outside.

That the original population throughout the area was large seems from all the testimony—not only of early settlers, but of the Indians themselves—to be certain. There were a large number of villages occupied, and a large number of old sites. Of course, all were not occupied at the same time; and much of the excess in local estimates seems to be due to having overlooked this fact, as well as that of the frequent gatherings of the people for celebrations of one sort or another, the large numbers thus present at one time giving a false idea of the real population. I believe, however, that we should be within the mark if we assumed for the Maidu, before their association with Europeans, a population of about 4000.

---

[1] History of Amador County, p. 260.

[2] Report of the Commissioner of Indian Affairs, 31st Cong., 2d Sess., Sen. Ex. Doc., Vol. I, Pt. I, p. 124.

[3] Report of the Commissioner of Indian Affairs, 34th Cong., 3d Sess., Sen. Ex. Doc., Vol. II, p. 797.

MIGRATION.—The Maidu, in common with nearly all Californian Indians, offer a sharp contrast to the Indians of the more easterly and southerly tribes, in that they have no traditions of having lived elsewhere than in their present home. Turning to culture and mythology, we find few certain evidences of movement. There are perhaps slight traces in the creation myths, of a movement from west to east; but such indications are faint, and the whole question of movement must remain problematical for the present. From all indications, therefore, we are forced to regard the Maidu as having been settled, for at least a long period, in the region they occupied when first known.

MATERIAL CULTURE.

MANUFACTURES. *Work in Stone.*—The stone objects made and used by the Maidu include knives, arrow and spear points, clubs (?), celts, arrow-straighteners, scrapers, pestles, mortars, metates, pipes, and charms.

The methods of manufacture of knives and of spear and arrow points do not differ from those usually employed by Indians in other portions of the continent. The materials used were various: a rather hard black basalt being used in many cases for knives and spear-heads; while obsidian, obtained largely in trade, was used for arrow-points, and in some cases also for knives. Flint and jasper were also used. Near Oroville was one of the best-known spots for getting flint, from a cave on or near Table Mountain. The opening to the cave was very small, but, once in, the size was such that a man could stand upright. A person going to get flint must crawl in, and then throw ahead of him beads or dried meat as offerings to the spirits for the flint he was about to take. A person was allowed to take only so much flint as he could break off at a single blow. The flint obtained, the person had to crawl out backwards. If the regulations were not complied with, the person would have bad luck; the flint would not chip well, or would fail to kill.

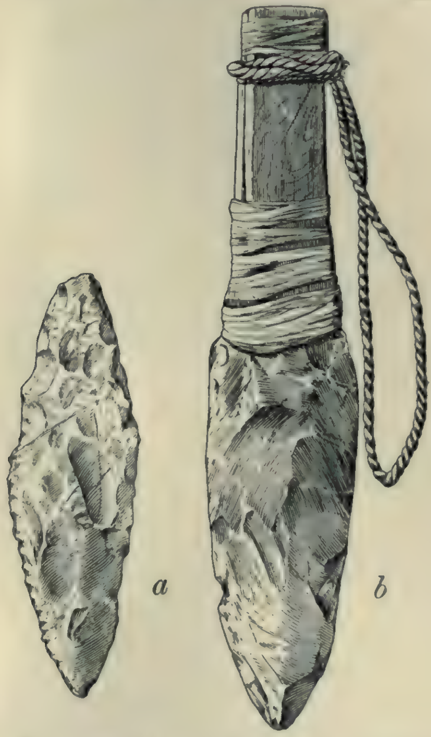


Fig. 1, *a* ($\frac{50}{1593}$), *b* ($\frac{50}{4183}$). Stone Knives. Length of points, 11 cm., 17 cm.

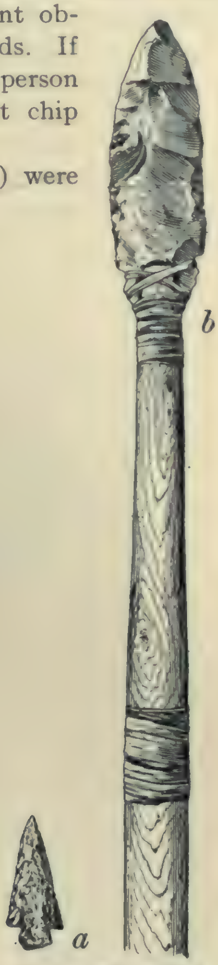


Fig. 2, *a* ($\frac{50}{758}$), *b* ($\frac{50}{4226}$). Spear-points. Length, 7 cm., 16 cm.

Knives (Fig. 1) and spear-points (Fig. 2) were rather roughly made, and were generally, in the case of the former, fastened into a handle of wood made of two pieces tied together and further secured by means of pitch. The spear-point was inserted in the end of the spear-shaft, which was then wrapped with sinew and heavily pitched. In the manufacture of arrow-points, a strip of buckskin was wound about the thumb, and passed down over the palm of the left hand. On this the piece of stone to be fashioned was held with the thumb. A bone flaker (Fig. 3) was used in the right hand, the flakes being thrown off by downward and forward pressure. Sharpened bone or antler points were used to press out the serrations sometimes made on arrow-points, and to work out the notches at the base of the point. Arrow-points were always very small. Some of the stone implements seem to have been ground after being chipped.

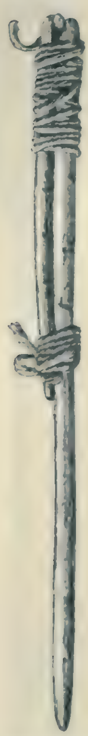


Fig. 3 ($\frac{1}{886}$).
Arrow-point Flaker.
Length, 29 cm.

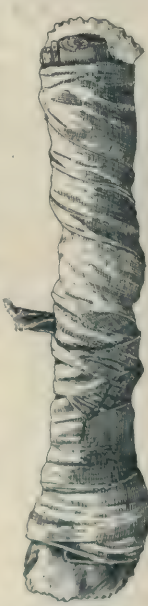


Fig. 4 ($\frac{1}{887}$).
Stone Scraper.
Length, 21 cm.

Stone scrapers were used chiefly by the Northwestern Maidu, it seems. They were flaked so as to have a sharp, serrated edge, and often hafted, one at each end of a wooden handle (Fig. 4). In use, the scraper was drawn towards the body.

A rude axe seems to have been used, being merely a worked piece of trap, either held in the hand, or affixed by sinew wrappings to a wooden handle. The Northeastern Maidu claim that they had a species of axe, used in war as well as for wood-cutting (Fig. 5). The stone heads for these were said not to have been made, but were found, as were the mortars. The head was fastened with pitch and sinew between two sticks, or in the cleft of a split stick.

Arrow-straighteners were generally made of sandstone; two pieces of convenient size, with a groove worked in them, being used, the arrow-shaft being run back and forth between them (Fig. 6). The teeth were also much used in straightening.

The question of mortars is one which presents some difficulty. The almost unanimous testimony of the Indians is to the effect that neither they nor their ancestors, within their recollection, ever made the finished, globular mortars of which so many hundreds have been found within the area occupied by the stock. In the manufacture of acorn-flour, they were accustomed to use either the smooth, flat surface of some large bowlder or ledge, or else a flat slab or block of stone of irregular shape sunk into the floor of their houses. On this flat surface the pulverization of the acorns took place. In the course of time, from the constant pounding, a hole or cavity would be worn in the surface of the stone. In all cases noted, these cavities were distinctly funnel-shaped, coming to a rather sharp point at the bottom (Fig. 7). The cavities are all the way from a few millimetres to twelve or even fifteen centimetres in depth, and rarely over ten centimetres in diameter at their upper edge. The Maidu are agreed, that, so soon as such a cavity was worn to any depth in the stone, the stone was discarded, or, in the case of the large bowlders or ledges, a new spot on its surface was chosen. This was done because such a deep, narrow, funnel-shaped cavity rendered it very difficult to pulverize the acorns properly, the meal collecting and packing into a solid, hard mass at the bottom of the hole. In every case where the preparation of acorn-meal has been personally witnessed, a flat or

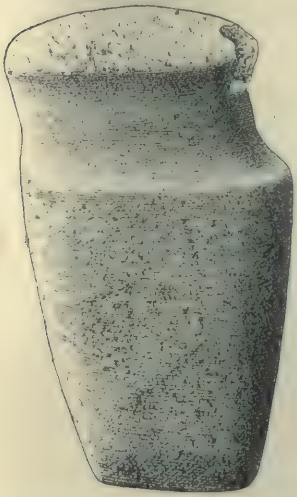


Fig. 5 ($\frac{50}{838}$). Stone Axe. Length, 13.5 cm.

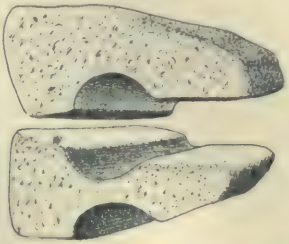


Fig. 6 ($\frac{50}{1888}$). Arrow-straightener. Length, 7 cm.

nearly flat stone was in use, and in no case was there more than a very shallow depression at the spot where the pestle descended. When most marked, this hollow was not over two centimetres and a half in depth. Discarded blocks and slabs of stone were seen in which the cavity had, as above described, become too deep for use. In not a single case was a mortar with the usual broad excavation and globular form seen in use.

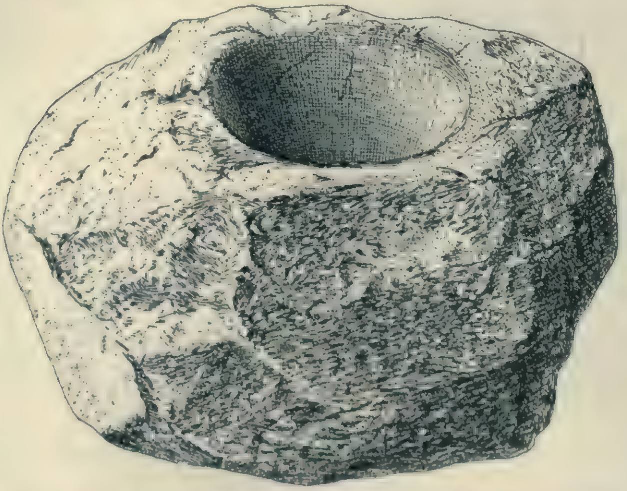


Fig. 7 ($\frac{50}{881}$). Stone Mortar-block with Funnel-shaped Cavity. Greatest diameter, 34 cm.

The statement is made, moreover, by the Indians, that finished, widely and deeply excavated globular mortars were found by them in certain localities in considerable numbers. These localities were gravel-banks along the edges of streams, the stream-beds themselves, or the surface of the ground in certain stony places. They claim that in a few spots large numbers of mortars were to be found; and some declare that the shamans know where these spots are, and go there at times to secure mortars, which, as will be seen later in speaking of religious ceremonials, were used for various mysterious and sacred purposes. Everywhere throughout the Northern Maidu area these mortars are regarded with considerable awe and veneration, and are feared quite keenly in many instances. Apart from their ceremonial uses, every family is anxious to own a mortar; but it is never kept in the house or near it, being generally buried some distance away, and occasionally dug up and examined. Mortars were used by the shamans as receptacles in which to keep their most powerful and precious charms, especially the "pains" which they shot at people to cause disease or death. Such "pains" were kept in a mortar, with another mortar inverted over the first, the whole carefully secreted in a hollow log or under a large stone at a considerable distance from all habitations or trails. In the initiation ceremonies of the Secret Society the sacred meal used for sprinkling the novices must similarly be kept in a mortar. Lastly, the mortars are generally known by the name of ku′kinim tō′ni or i′tūm tō′ni ("spirit or pain baskets"), and are often supposed to be themselves the abiding-places of powerful spirits; although the belief in the mortars' animation, and their ability to move of their own accord from place to place, is not held here, as it is among the Shasta. By some the mortars are said to have been made by the Creator, or the Coyote, at the time of the creation, and scattered over the world for the use of mankind. By others they are supposed to have been people originally, during the bĕtē′itō, or time of the "first people," who were turned into stone in this form at the coming of the Indian people, when the other "first people" became animals.

It would seem, therefore, that the mortars of which such large numbers have been found,—in many cases, it is claimed, in the gold-bearing gravels,—and about which, in the latter instance, so much controversy and discussion have taken place, were not made by the Maidu, or at least have not been made by them within the traditional period.

The pestles used for pounding the acorn-meal are of different sizes, but are substantially of the same type. Generally cylindrical, with a circular or oval cross-section, they vary from fifteen to thirty-five centimetres in length, with a diameter ranging from six to almost ten centimetres (Fig. 8). Occasionally a form is found with a squarish cross-section, but these are not common. Often river-pebbles of appropriate shape and size are used without further modification of form.

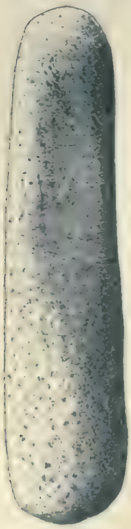


Fig. 8 ($\frac{50}{1868}$ b). Pestle. Length, 26 cm.

Metates and mullers were in use chiefly for grinding the grass-seeds and other seeds, of which a considerable variety were used for food. The metate is merely a slab of coarse-grained stone, set at a low angle; the muller being a smaller piece of the same stone, convenient to grasp in the hand.

Stone pipes (Fig. 9, *a*, *b*,) would seem to have been at all times objects of value, and to have been, on the whole, somewhat scarce, a wooden pipe being far more common. All pipes were of the tubular form. In general, the stone pipes were short, ranging from ten to fifteen centimetres in length, and usually made from steatite. The pipe used by the pehēi'pe, or clown, was larger, as a rule, and always made of soapstone. It had, moreover, a rim or ring about the mouth-end (see Fig. 66). The pipes were drilled by means of a piece of deer-antler, which was pounded with another stone, till, after a long time, the cavity was made. Sometimes sand was added, which accelerated the work. It is claimed that there was no twirling of the deer-antler, or other method of drilling. The details of the manufacture seem to have been to a considerable extent lost. It is also claimed that occasionally a pipe was found, just as were the mortars. These pipes which were found were regarded as of mysterious origin, and were to be handled with great care.

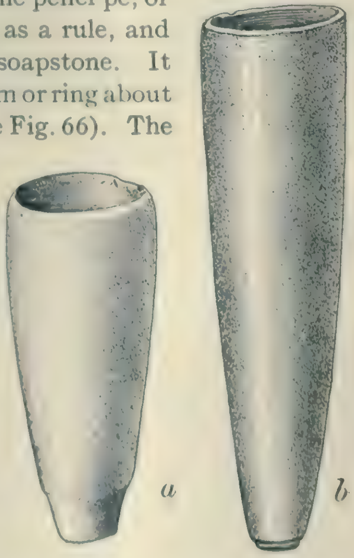


Fig. 9, *a* ($\frac{1}{993}$), *b* ($\frac{50}{2008}$). Stone Pipes. Length, 8.5 cm., 14 cm.

To drop a stone pipe of any sort, but in particular of this type, was very unfortunate, and bad luck or illness was sure to follow. As in the case of the mortars, the Shasta held the pipes as capable of independent motion, but this belief was not held by the Maidu.

Small soapstone vessels (Fig. 10) were very sparingly in use, chiefly, it would seem, among the Northeastern Maidu.

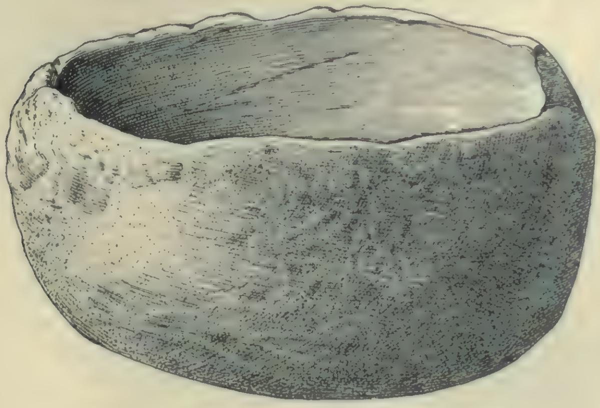


Fig. 10 ($\frac{50}{831}$). Soapstone Vessel. Diameter, 15.5 cm.

Cylindrical beads of stone were used, usually in the form of necklaces. These beads were either white or a yellowish pink, and were from two to five centimetres in length, and one centimetre in diameter. These stone beads were held in great esteem, and were among the most valuable of all the beads in use. It seems, they were obtained, as a rule, in a finished state, in trade with the Wintun.

Shamans wore pendant from the neck obsidian knives, which were regarded as of great value and mysterious power (Fig. 11, *a*). The well-made stone object shown in Fig. 11, *b*, was worn suspended from the neck as a charm or lucky stone, and was chiefly used in the gambling-games, being stuck point down in the ground before the player.

Work in Wood, Bone, and Shell.—With the exception of their excellent bows and arrows and their very crude dug-out canoes, the Maidu made little, if any, use of wood for implements. Small trees were felled by the laborious process of hacking with sharp flints held in the hand, or roughly hafted as already described. Once felled, the trunk was commonly burned in two where desired. Large trees they did not attempt to cut down, but utilized such as were blown down by the wind or burned down in forest-fires. The rude dug-out canoes, in use only among the Northeastern Maidu, were made from fallen pines, as a rule. A section of the requisite length was burned off, the bark stripped, and the canoe excavated by fire, pitch being applied to the portions it was desired to burn out, and water or wet earth thrown on when it was wanted to stop the burning at any point. The charred wood was scraped off with rough axes or adzes, and the fire kept up till the canoe was completely hollowed out. Elk-antler wedges were used to split trees, being driven by a round hammer-stone held in the hand. None of these wedges seem now to be in existence.

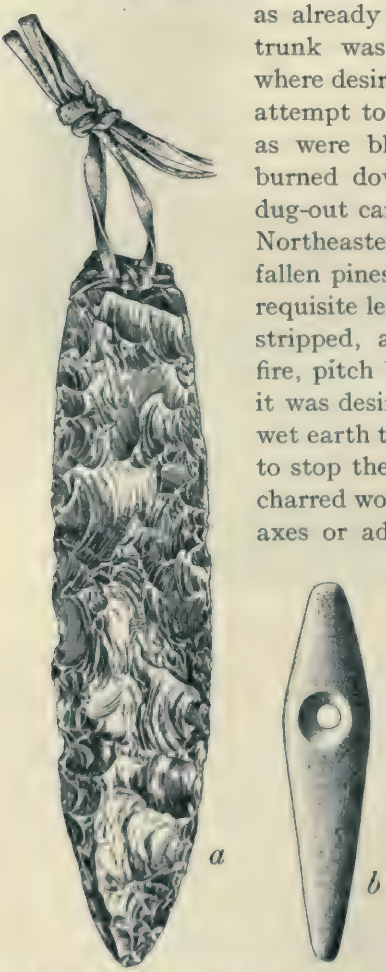


Fig. 11, *a* ([illegible]), *b* ([illegible]). Neck-pendants used as Charms. Length, 28 cm., 16.5 cm.

From bone and antler the Maidu made scrapers, awls, needles, wedges, arrow-flakers, and ear and nose ornaments, fish-hooks and salmon-gigs. As a scraper, the deer-ulna was in common use, but more in the Sierra than in the foot-hills and Sacramento Valley, where the stone scraper seems to have been more common. Awls and basket-needles were of bone (Fig. 12). Arrow-flakers of bone were often tied to wooden handles. For nose-ornaments, a simple bone needle was sometimes used. For ear-ornaments, a section of bird-bone was the most common type, ornamented with incised designs (see Fig. 38, *a*).

Shell was used only for ornament and for currency. The white, disk-shaped beads common to all this coast region were largely used by the Maidu. They were obtained apparently from the Wintun, who, in their turn, probably obtained them from the Pomo and Yuki along the coast. From the statements made by the Indians, it would appear that the beads were obtained either in the finished or partly finished state. In the latter case, they were already drilled and strung on cords, but were not yet rounded and smoothed. This finishing was accomplished in the usual manner, by rolling the string of imperfect disks between two stones, thus grinding them to perfect circles. Abalone was used largely for ear-ornaments and for necklaces. The shell was used in irregular or rectangular pieces, and was hung pendant from cords, either by itself, or in connection with the ordinary white disk beads. It was obtained, like the latter, from the Wintun. Dentalium was also known and highly prized. It was used, however, but little, because of its rarity.

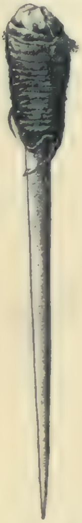


Fig. 12 ($\frac{1}{887}$ d). Bone Awl or Basket-needle. Length, 16.5 cm.

Preparation of Hides.—The preparation of hides was carried on by the women, as a rule. The hair was first removed by means of bone or stone scrapers, the hide being laid either over a stump or on a slanting post set in the ground for the purpose. Next the skin was thoroughly soaked, and rubbed with deer-brains, either fresh or dried. The dried brains were prepared in the following manner: The fresh brains were mashed, and mixed with a quantity of dry moss, and the mixture was then made into flat cakes and dried. In this form the brains could be kept indefinitely. When used, the cake was dipped into warm water and rubbed over the hide. As a rule, skins were not smoked. After treatment with the brains, the hide was again soaked in water, wrung out, and rubbed between the hands before a fire until dry. If necessary, the soaking and rubbing till dry were repeated if the skin was not soft enough.

Cordage and Netting.—Cord and thread of various sizes were made principally from the fibre of the milkweed (*Asclepias speciosa*, and probably another species as well) and wild hemp (*Apocynum* sp.). The stalks were gathered in the autumn when thoroughly dry, and were crushed and rolled between the hands till the woody stem had been separated from the long outer fibres. These were then rolled on the thigh into a two-strand twine. If stronger cord

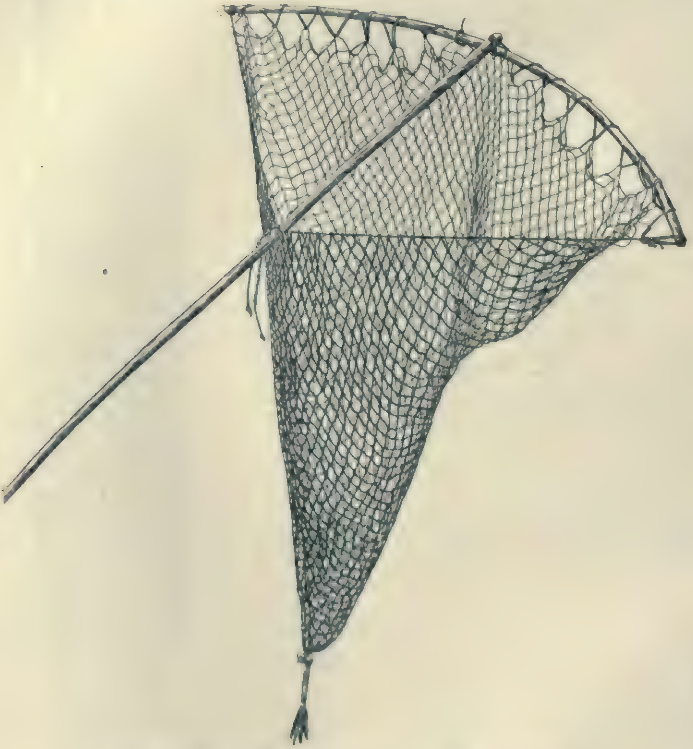


Fig. 13 ($\frac{50}{882}$). Model of a Fish-net. Length of net, 99 cm.

was desired, several of these smaller cords were made into one of greater thickness. From this cord, which was of great strength and durability, the Maidu made their nets and their netted caps (wīka′).

Nets for fishing were made in varying sizes, heavy or light cord being used, and the mesh being made large or small, according to the uses of the net. Seine-nets seem to have been used by the Maidu of the Sacramento Valley, whereas in the mountains the favorite net was of the type shown in Fig. 13. In netting, the cord was kept on a netting-shuttle composed of two slender sticks (Fig. 14). No mesh-measures were used, the first two or three fingers of the hand being the only measure in making the mesh-loops. The knot used is shown in detail in Fig. 14.

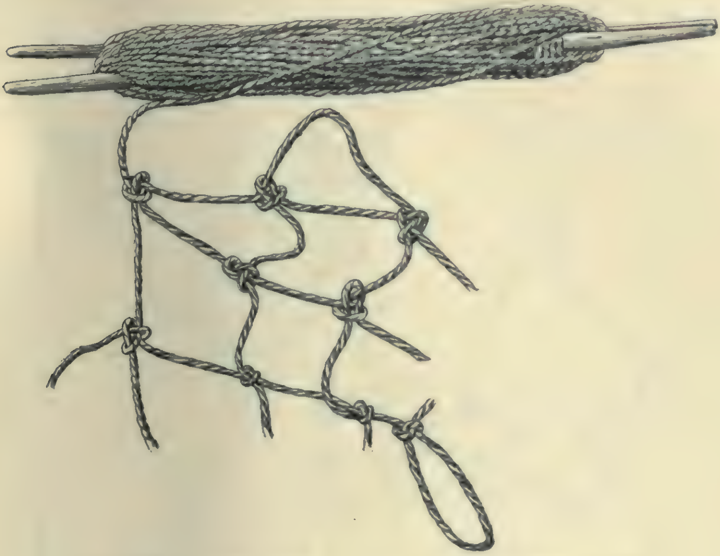


Fig. 14 ($\frac{50}{1778}$). Netting-shuttle and Knots. Length of shuttle, 34.5 cm.

In the manufacture of the netted cap, several different methods, it seems, are followed. All of these are alike apparently, in that, to begin with, a small forked stick is stuck into the ground, in front of the man making the cap. To the top of the peg or stick a loop of cord is tied, and into this loop the maker proceeds to net other loops, as shown in

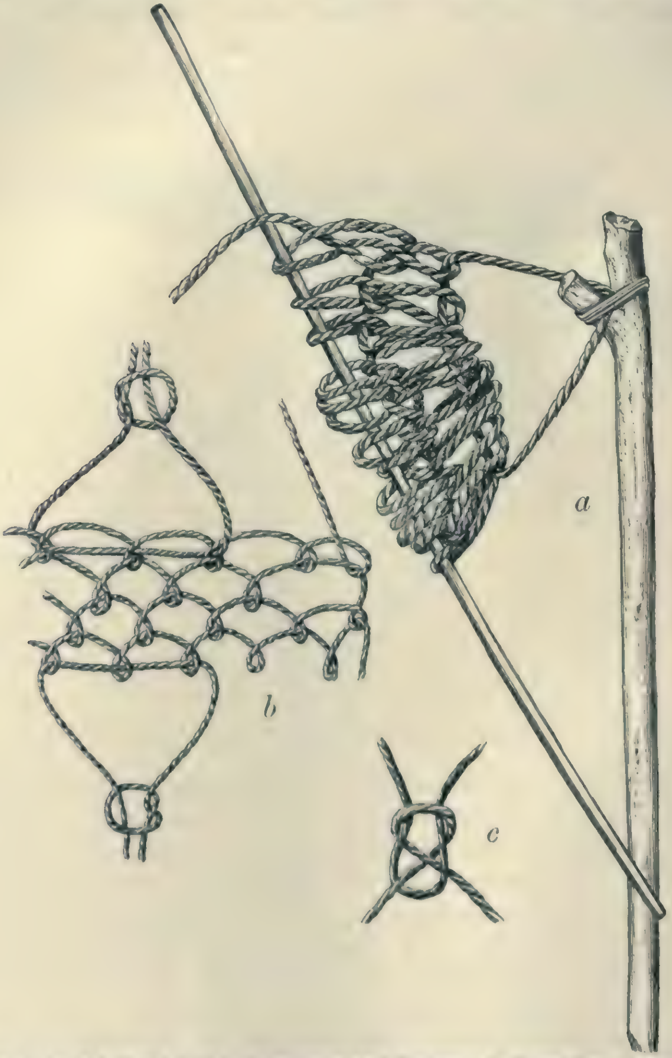
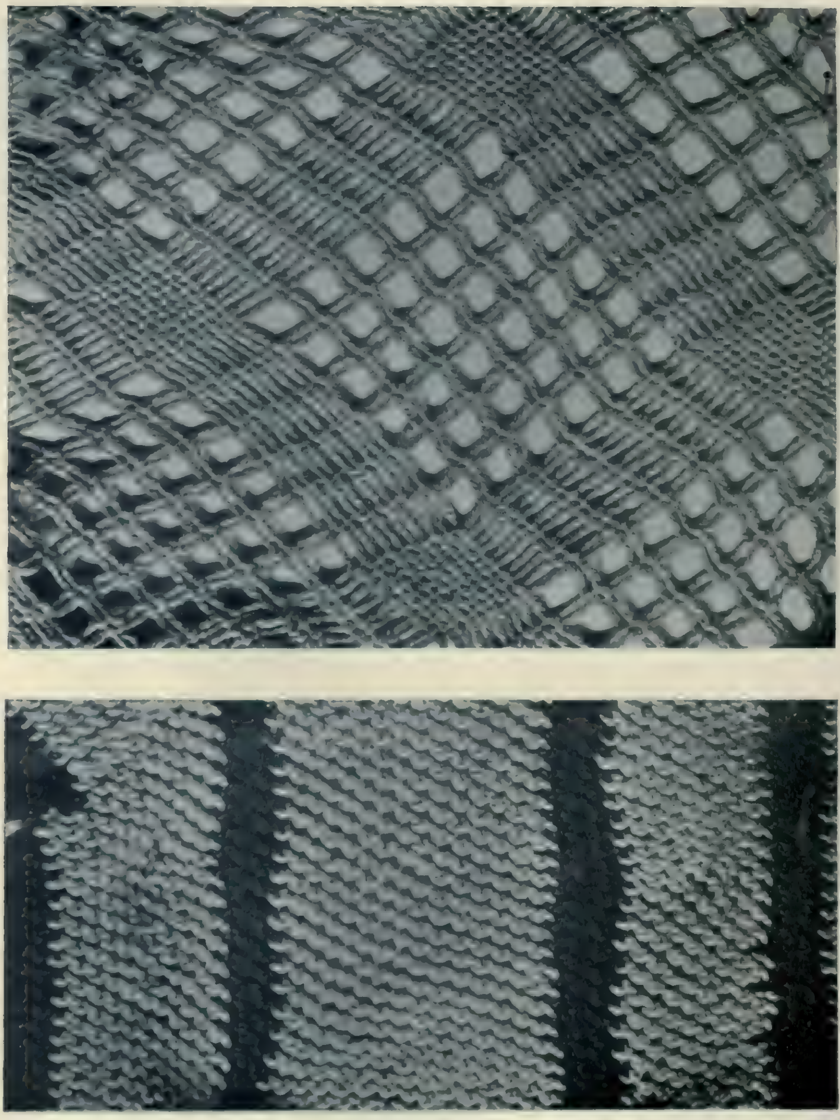


Fig. 15 *a* ($\frac{50}{2488}$), *b* ($\frac{50}{2603}$), *c* ($\frac{50}{2378}$). Manufacture and Technique of Netted Cap. Length of forked stick, 14 cm.

Fig. 15, *a*. These loops, as fast as they are made, are strung on a long slender twig. This serves to keep the row of loops in



Portions of Netted Caps, or Wīka', showing Different Designs.

order, and even in length. On completing the first row of loops, the maker starts a second row, netting this into the preceding, held in order on the twig, and using a second twig to string this second row upon. The second row being completed, the first twig is pulled out, and used to string the third row upon, and so on. A considerable number of other stitches were in use besides this just described. The general appearance of these is shown in Plate XXXIX, and the technique in Fig. 15, *b* and *c*, in which *c* represents the knot used in the open-work diamond-pattern cap. In *b* we have the type called by Mason "coiled work without foundation," found among the northern Athapascan and the Pima, and extensively to the south, even in northern South America.

Basketry and Weaving.—The manufacture of baskets is by far the most important of the arts of the Maidu. The materials used varied somewhat in different portions of the area, but were largely confined either to various species of willow or to the red-bud (*Cercis occidentalis* Torr.). The species of willow most esteemed in the whole northern portion of the Maidu area seems to be *Salix fluviatilis* Nutt., var. *argyrophylla*, although a number of other species were also used. Shoots of the hazel (*Corylus rostrata* Ait. var., *californica* A. D. C.) were used for the radial elements in burden-baskets. In the higher Sierra the roots of the yellow pine (*Pinus ponderosa* Dougl.) were employed to a considerable extent in making large burden-baskets; and a grass (probably *Xerophyllum tenax* Nutt.), together with the roots of the common brake (*Pteris aquilina* L.) and the stems of the maiden-hair fern (*Adiantum pedatum* L.), were also used. The peeled willow only was used, and for both coil and sewing-splint. The red-bud was used also for both purposes, but was used both peeled and unpeeled for sewing-splint. The pine-root was in use only for sewing-splint, and was nearly always dyed black by burying it in a mixture of mud and charcoal for some time.

Both coiled and twined basketry was in use among the Maidu, the former being employed for all except burden-baskets, mortar or milling baskets, and coarse and open-work storage and dish baskets.

In basketry of the coiled variety, the coil was composed of a bundle of three twigs, or stems, being of the type called by Mason "three-rod foundation." These twigs or shoots of willow or red-bud were gathered in large quantities by the women, dried, and kept in bundles for future use. Previous to using them for basket-making, the twigs were soaked for some time in water, and the bark scraped off by means of a sharp fragment of stone, or, at present, a piece of glass. The bark removed, the surface was smoothed and evened. The sewing-splints were soaked similarly; and unless they were of red-bud, and were intended to form the red designs, the bark was removed as carefully as in case of the coil-twigs. When thoroughly soaked, the sewing-splints had to be split. This was done by splitting the end of the twig, holding one of the "splits" in the teeth and the other in the right hand, and then, while pulling the twig in two, following the split with the left hand, to see that it ran evenly from one end of the twig to the other. The skill shown in rapidly producing smooth, even splints in this way is remarkable. Thus prepared, the splints are coiled in bundles, and kept for later use, or may be used at once if needed.

In the manufacture of the basket, the bundle of three twigs is coiled tightly on itself, each successive coil being sewed firmly to the preceding by passing a strand of the sewing-splint over the three components of the coil, and under the upper member of the coil below (Fig. 16). A bone needle (see Fig. 12) is used to make the opening between the rods of the lower coil. The direction of coiling is, among the Maidu, very uniform, all bowl or storage baskets being coiled from right to left, and all platter or plaque baskets in the opposite direction. The reason for this reversal is not clear. As the twigs composing the bundle are

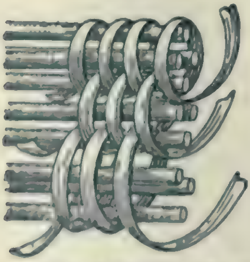


Fig. 16. Technique of Three-rod Coiled Basketry. (After Otis T. Mason, Report of National Museum, 1902.)

not all of the same length, it follows, that, as the bundle is coiled upon itself, the end of one twig is reached before the whole bundle has been used. To keep the bundle at its original thickness, a new twig is added in such cases; and thus, by continually adding a new twig to take the place of that whose end has been reached, the diameter of the bundle is kept uniform. By using white or peeled sewing-splints with those which have the red bark still left on, patterns are produced in great variety. The supply of coil-twigs and sewing-splints are kept soaking, as a rule, while making a basket, and the basket itself is kept wet by thorough sprinkling every few stitches. There was, of course, much variation in the fineness of the stitch and in the diameter of the coil-bundle; the larger baskets having, as a rule, a bundle of greater size and strength than the smaller baskets, and also being proportionately coarser in stitch. Baskets of this type were very firm, and were water-tight. The edges of all coiled baskets are simple.

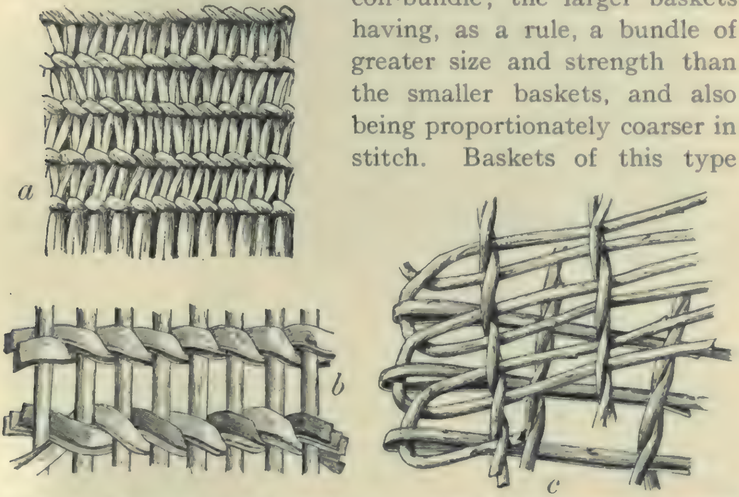


Fig. 17, *a*, Technique of Simple Twined Basketry (after Otis T. Mason, Report of National Museum, 1902); *b*, Twining with Double Overlay; *c* ($\frac{50}{3238}$), Simple Twining used in Fish-traps.

As already stated, twined basketry was used only on the burden-baskets, for the large open-work storage and food baskets and trays, for seed-beaters and fish-traps. Both simple twining (Fig. 17, *a*), and twining with double overlay (Fig. 17, *b*), were in use, the latter confined strictly, it seems, to the

Northeastern Maidu, who were in contact with the Pit River and Hat Creek peoples, who employed this method extensively. Fish-traps were usually of the simple twined type (Fig. 17, *c*). The inner funnel is not made by bending the rod over, but is inserted as shown in Fig. 17, *c*. Seed-beaters were, in the region of the Northwestern Maidu, predominantly of wicker-work (see Fig. 47, *a*).

The designs on the baskets are produced, as already stated, by the use of different-colored sewing-splints. The unbarked red-bud is most frequently used for the purpose, although in the region occupied by the Northeastern Maidu fern-root and fern-stems are sometimes used.

Mats were formerly much used for beds, for doors, and sometimes for covering temporary summer shelters. They were, as a rule, made from tule (*Scirpus lacustris* L.) or cat-tail (*Typha latifolia* L.). The use of the mats has now gone out. The method of manufacture was to lay the reeds close together on the ground, and then twine a double cord about them at each end, and at two or more points between.

The making of robes and blankets from strips of rabbit and wild-cat skin, or of the skin of geese and crows, was also an important branch of the weaving-art as practised by the Maidu. The fur blankets were more common in the mountain region, it would seem; the bird-skin, in the Sacramento Valley. The skin, with fur or feathers left on, was prepared by cutting it into strips from one to two centimetres in width. The strips, on drying, curled or rolled, leaving the fur or feather side out, and forming thus a fur or feather rope or cord of great softness. A sufficient length having been prepared, it was, in the case of the bird-skins, usually twisted with a fibre cord to give added strength. Two poles about two metres in length were then set up about one metre apart. The fur or feather rope was then wound back and forth about the two poles till a sufficient length of warp was made. The process of weaving then began, and consisted merely in a slow and laborious twining of a double weft over the successive warp-strands, knotting the cord to the outer warp-strand at the top and bottom as they were alternately reached. The completed blankets were loose in texture, but very warm, and were highly prized.

Work in Feathers.—Feather ornaments were largely used by the Maidu. We may distinguish between the several manners of handling the feather. In some cases parts of the bird's skin were glued to a leather strip. Feather belts, worn mainly by women in certain dances, are made in this manner. Those at present in use (Fig. 18) are made by attaching woodpeckers' scalps to a leather strip, although it is declared by some informants that formerly the separate feathers were attached singly to the buckskin or tied into a netted cord fabric. Often scalps or feathers of the duck and the wild canary were also used to give variety to the belt, and to produce patterns on it similar to the patterns produced by the Pomo on their feathered baskets. The belts were usually, but not always, edged with quail-plumes.

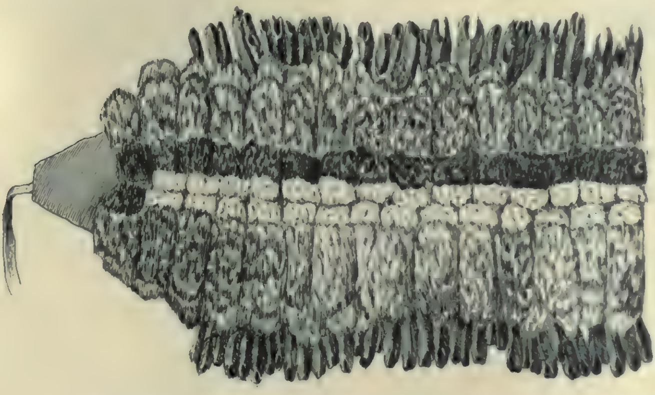


Fig. 18 ($\frac{50}{681}$). Portion of Feather Belt. Total length, 95 cm.

Feather plume-sticks were also made by tying parts of bird-skins and quail-tips to a small stick, which was generally of manzanita or other fine-grained hard wood. The scalps and tips were arranged around a stick, beginning at the top, and tied on with a string, each turn of the string being covered by overlapping scalps. The end of the string is tied around the base of the plumes (Fig. 19, *a;* also Fig. 38, *b*, *c*).

Some of these plumes were further decorated with beaded strings, which are inserted near the uppermost scalp and at the base of the plume (Fig. 19, *b*; also Fig. 38, *b*). In some cases the beaded strings end in a tassel made by tying a woodpecker-scalp around the end of the string. Feather pendants attached to strings are also sometimes added.

Feathers are attached to the ends of plumes by being firmly wrapped around a stick, the wrapping then being covered with flannel or bird-skins. Often a bit of down is tied around the bases of the feathers (Fig. 20, *a*, *b*). Sometimes the feathers are tied to the end of slender twigs. Generally white feathers are used for this purpose. Feathers are often attached to cords. The method of tying feathers to the end of a twig is shown in Fig. 21, *a*, while the tying to the middle of a twig is illustrated in Fig. 21, *b*.

Often feathers are attached to strings. They are either knotted into the string, as illustrated in Fig. 22, *a*–*c*, or tied between the twists of a double string, as shown in Fig. 23, *a*. The methods illustrated in Fig. 22, *a*, *b*, are used for inserting fairly long feathers into long feather strings which are used for making feather bunches, as will presently be described.

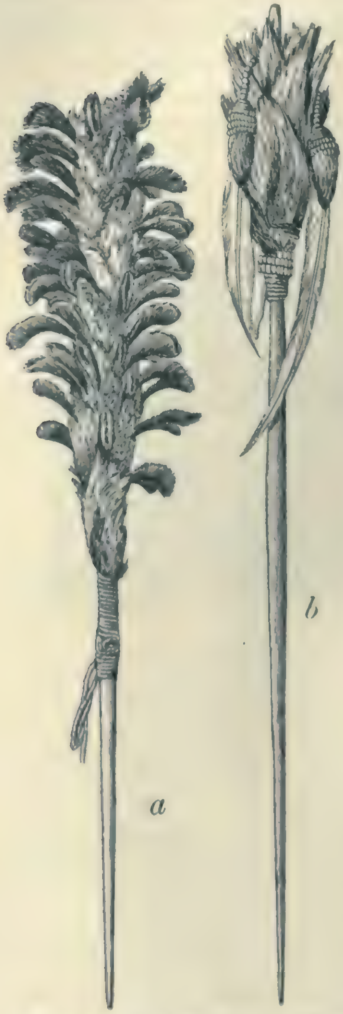


Fig. 19 *a* ($\frac{50}{376}$), *b* ($\frac{50}{[illegible]}$). Feather Plume-sticks. Length, 40 cm., 43.5 cm.

Both these styles illustrate the same method, the only difference being that in Fig. 22, *b*, the quill ends of the feathers are used for ornamentation, while in Fig. 22, *a*, the feather itself is so used. Fig. 22, *c*, illustrates the tying of single feathers, such as are used in the dancing-implements shown in Figs. 59 and 65. Fig. 23, *a*, illustrates the technique of the feather boa Fig. 23, *b*. Fig. 22, *d*, illustrates the method of tying a feather to the end of a string.

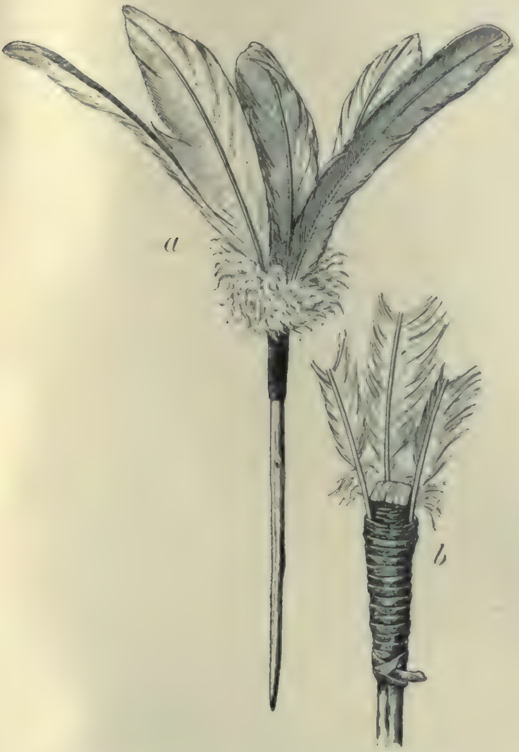


Fig. 20 ($\frac{50}{564}$ d, b). Feather Plume-sticks. Length, about 34 cm.

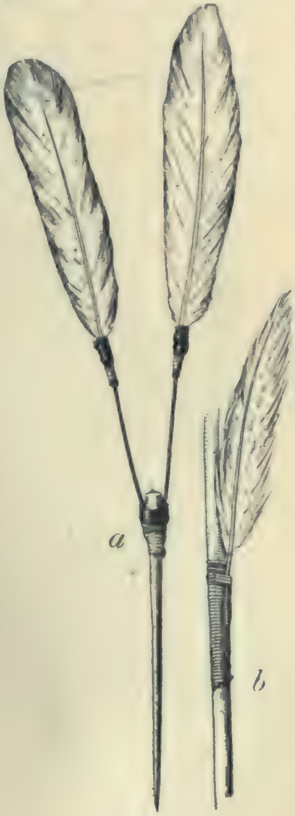


Fig. 21, *a* ($\frac{50}{378}$ a), *b* ($\frac{50}{2138}$). Feather "Tremblers." Length, 36.5 cm., 81 cm.

The attachment of the feather to the network which forms the foundation of feather capes and cloaks (Plates XL and

XLI) is illustrated in Fig. 24. The separate feathers, generally of the hawk, were attached to the net by folding the end of the quill over, and inserting it in the quill itself, the base having been cut off on a long slant for a distance of two centimetres or more.

Peculiar ornaments were made of scraped feathers of the yellow-hammer. Their manufacture is illustrated in Fig. 25, *a*, *b*. The feathers are carefully scraped and placed side by side, usually being laid butt and tip. They are then sewed together by three threads passing through the quills. Of these ornaments, peculiar square pendants, such as are shown in Figs. 25 *c* and 30, are made. The long feather bands of the type common throughout a large part of California are made in the same manner. A portion of one of these is shown in Fig. 25, *b*. In this case some of the feathers are only partially stripped, and from three to five of the pinkish stripped quills are alternated with a pair of partially stripped quills laid butt and tip. Feather bunches (Figs. 26 and 27) are made of long feathered strings such as were described before (Fig. 22). The feathers which are inserted into the feathered rope are often halved. In other cases they are partly stripped, and the feathers are turned over near the middle point. The bunches are formed by making a coil of the feathered rope in such a way that the feathers all turn one

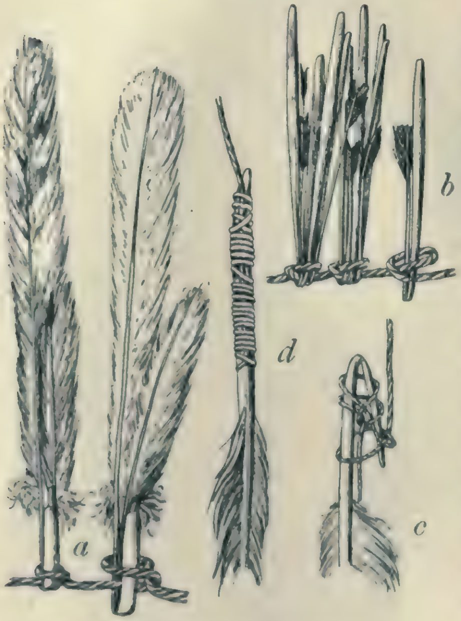
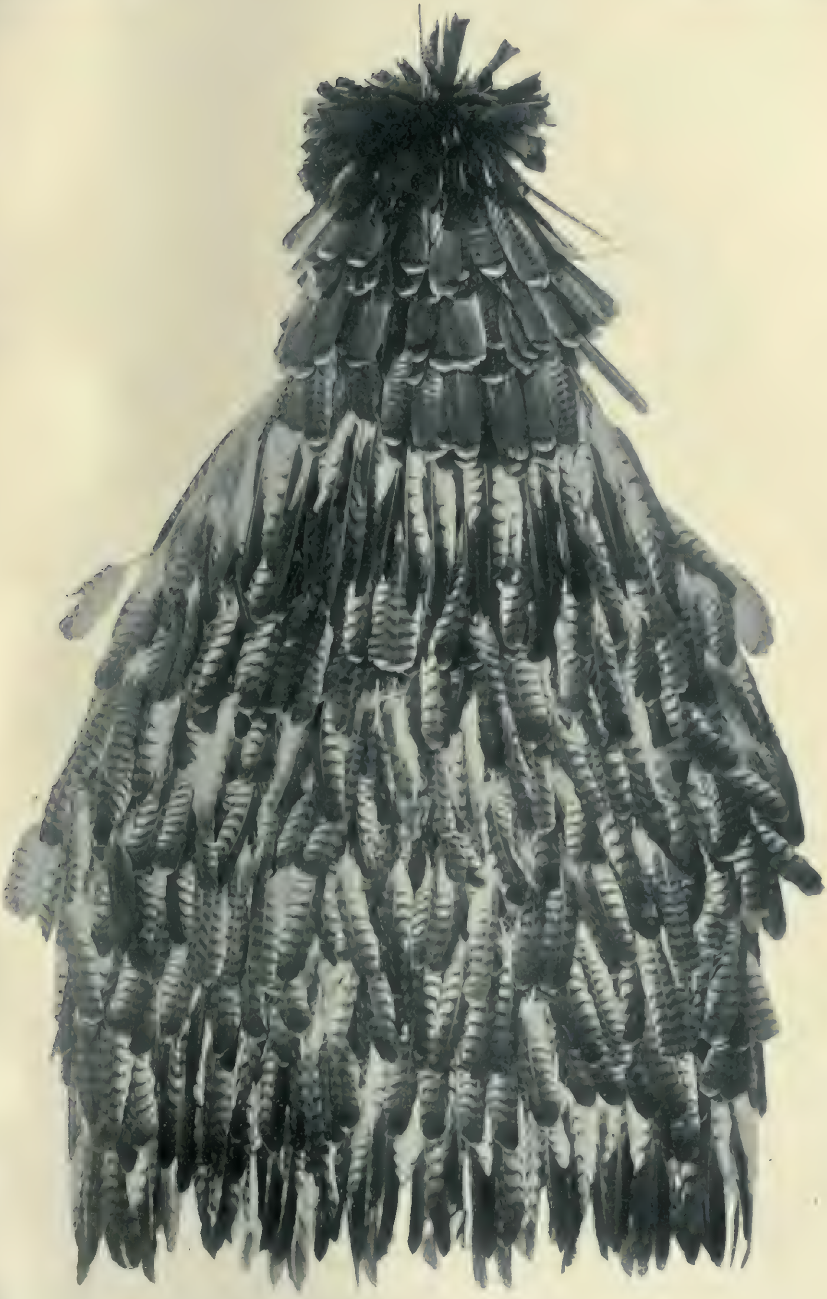


Fig. 22. Technique of Feather-tying.



Feather Cloak worn in Dances.

way. Then the coils are tied together in the manner illustrated in Fig. 28, *a*. In other cases, when the feather bunch is not quite so full, a construction like the one indicated in Fig. 28, *b*, is used, the feathered rope being attached to four points of a ring, and feathers being also inserted in one central feathered string which reaches across the ring.

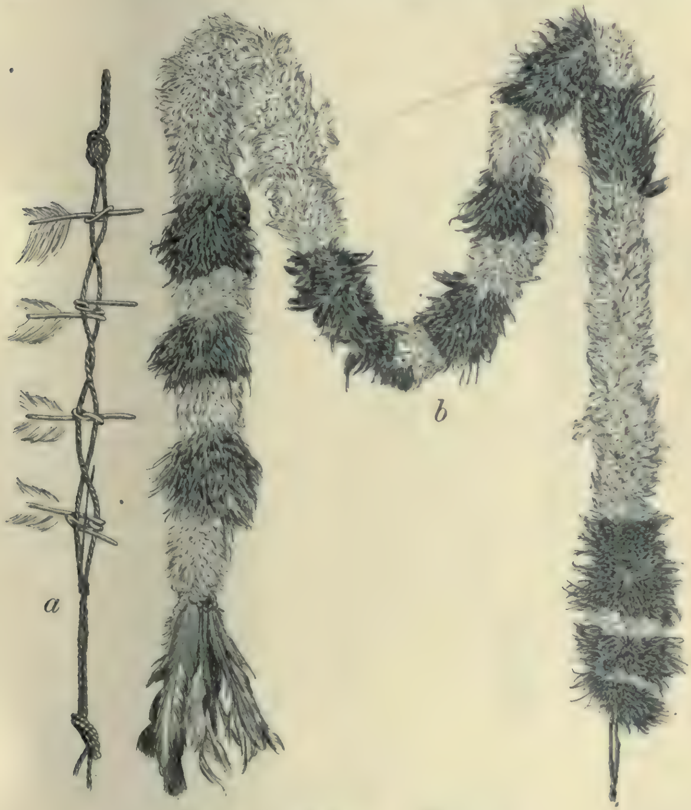


Fig. 23 ($\frac{50}{4181}$). **Feather Boa. Length, 145 cm.**

An interesting form of head-ornament is shown in the crown Fig. 29, *a*. This crown is made of four turns of a feathered rope, which are tied together by twos, and then connected as indicated in Fig. 29, *b*. The details of the attachments to this crown are the same as those illustrated in

Fig. 31, *a*. Fig. 30 represents a large crown similar to the one just described, but much more complex in construction. It is built on a double ring, part of which is shown in Fig. 31, *a*. From this ring rise a series of feathers, which are tied firmly into the inner ring, as shown in Fig. 31, *b*. Near the base of the vanes is a hoop of the same size as the inner ring of the bottom of the crown. The feathers are firmly tied to it, and thus form a cylindrical support for the whole crown. Outside of and around this is laid a feathered coil which forms the ring shown in the lower part of the crown. A number of small attachments are inserted in the outer ring. One of these is illustrated in Fig. 31, *a*. It consists of a stripped feather, which is wrapped with string. The outer end consists of a single shell bead, which is held in place by a small peg, which is driven into the open end of the quill. This peg also holds the string supporting the quilled square and the beads. Inside of the whole crown is a feather bunch similar to the one illustrated in Fig. 26, *a*.

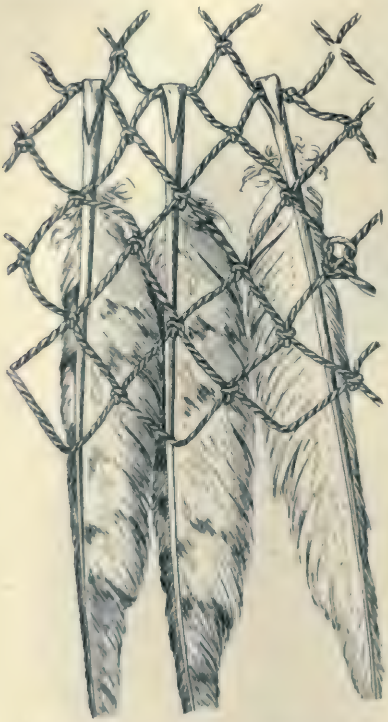


Fig. 24 (50/880). Technique of Feather Capes.

Clothing and Personal Adornment.—Throughout the area occupied by the Maidu, as a rule, only the scantiest clothing was worn. In spite of the much greater severity of the climate in the mountains as compared with that of the Sacramento Valley, it would seem that almost the same kind of clothing was worn in both regions.

During the long, hot summer, men, as a rule, throughout the area, went completely naked, or at most wore a narrow

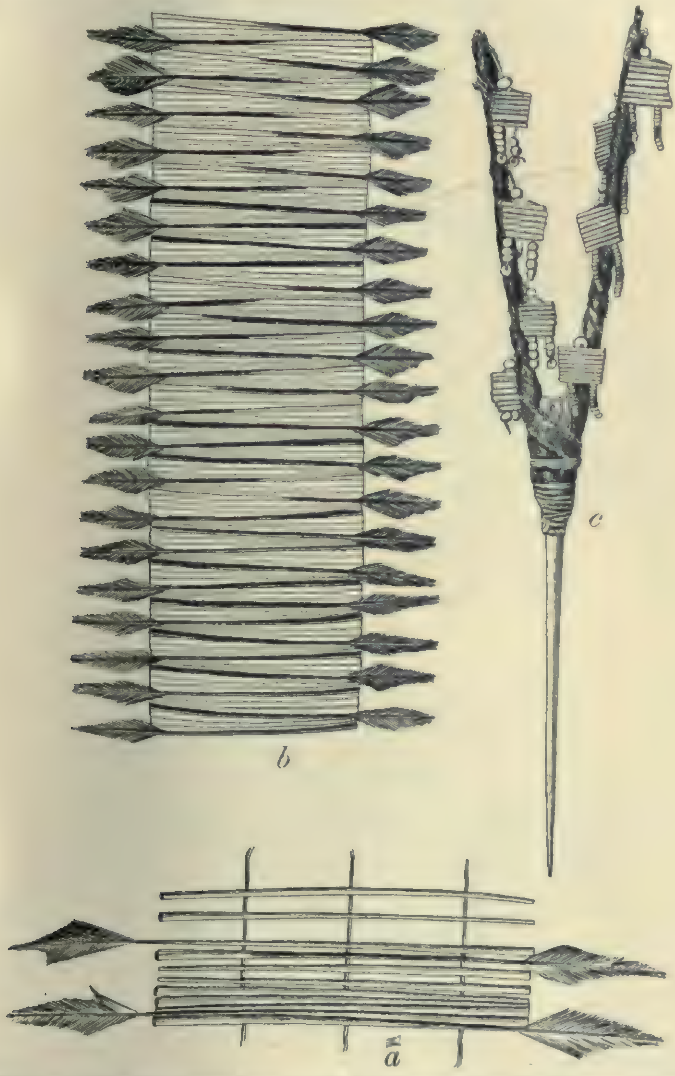


Fig. 25, *a*, *b* ($\frac{50}{1817}$, $\frac{50}{278}$), Feather Bands; *c* ($\frac{50}{278}$ b), "Trembler" with Quill Squares. Length, 40 cm., 76 cm., 26.5 cm.

breech-cloth of buckskin. In the Sacramento Valley and lower foot-hills, moccasins would seem not to have been very generally worn. In the higher Sierra, however, they were universally worn in winter, and were stuffed with a soft grass or sedge to keep the feet warm when walking in the snow

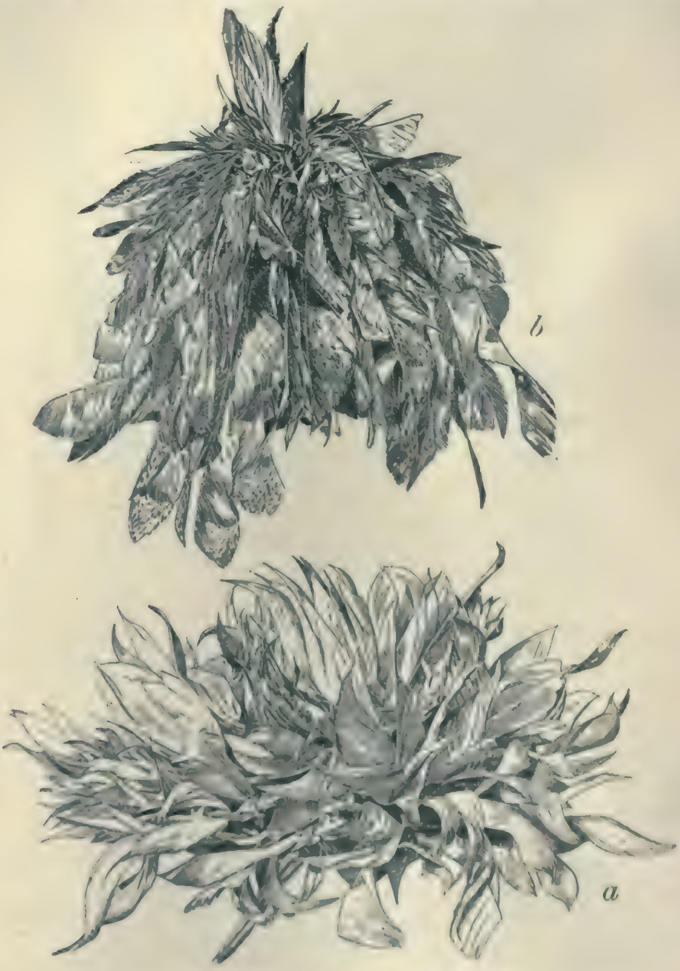
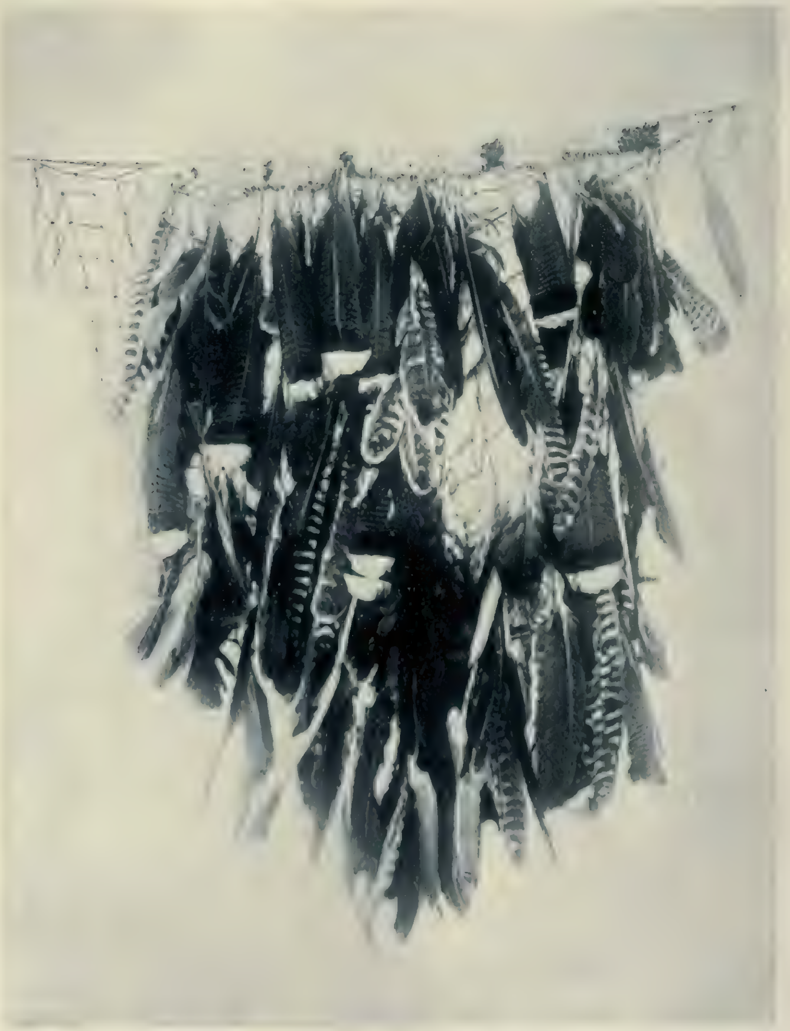


Fig. 26, *a* ([illegible]), *b* ([illegible]). **Feather Bunches.**

(Fig. 32). With the moccasin in this section, a deer-hide legging was worn, tanned with the hair on, and reaching from the ankle to just above the knee, where it was tied. The legging was worn hair-side in, and, in addition to the fastening above



Feather Cape worn in Dances.

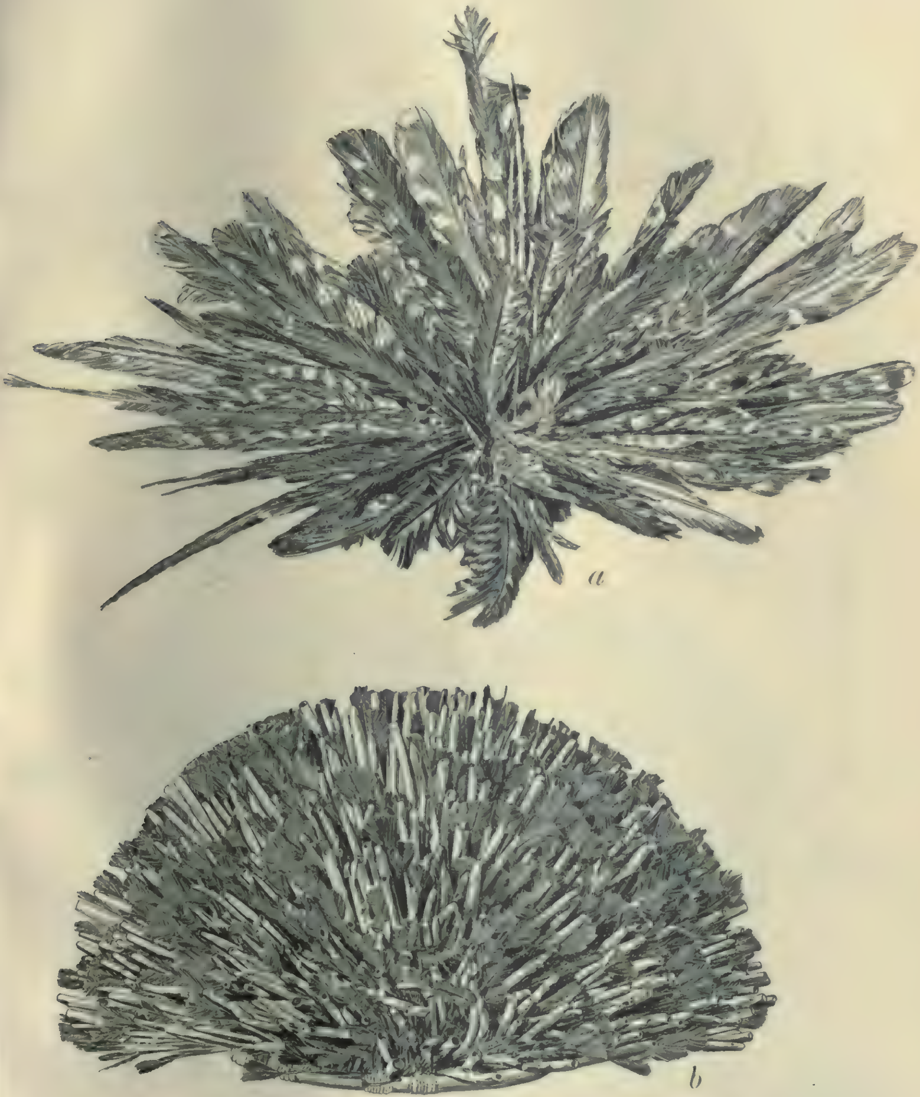


Fig. 27, *a* ($\frac{50}{580}$), *b* ($\frac{50}{3132}$). Feather Bunches.

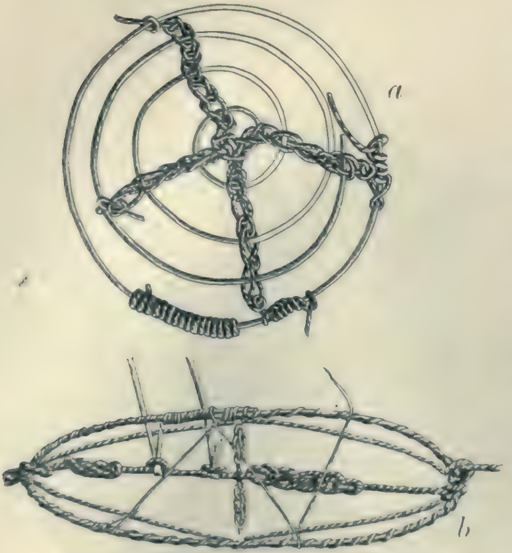


Fig. 28. Technique of Feather-Bunch Foundation.

the knee, was wound spirally with a thong from top to bottom. For body-covering in cold or rainy weather, the men of the North-eastern Maidu wore a deer-skin or mountain-lion skin robe over the shoulders. Some robes were of two skins roughly sewed together; and in all cases the fur was left on the skin, and

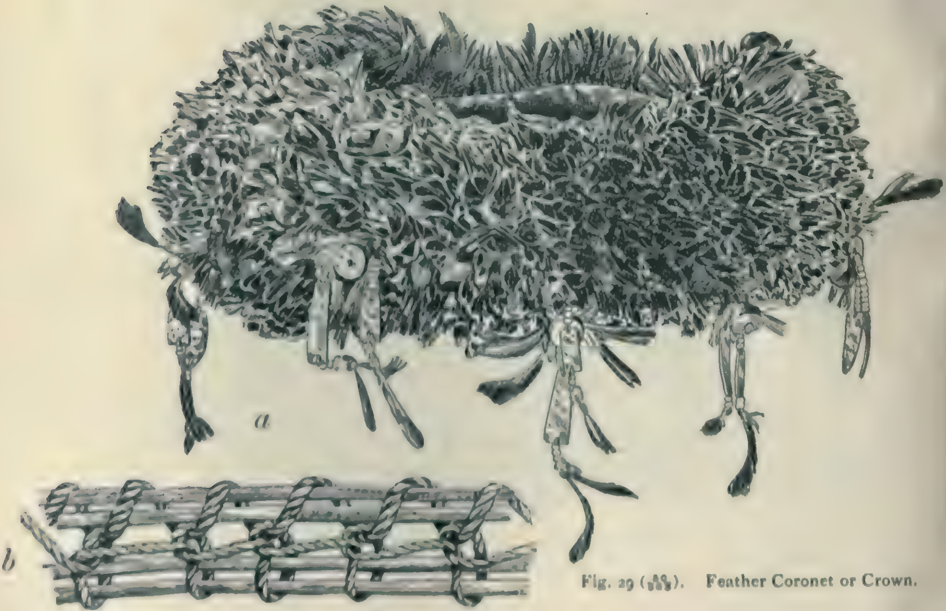


Fig. 29 ([illegible]). Feather Coronet or Crown.

the robe generally worn fur-side in. Occasionally the woven wild-cat or rabbit-skin robes were used, although this sort of robe was in general reserved for the bed only. Head-coverings seem to have been largely absent. The older men, however, in the mountain area, often wore the netted cap known as wīka′. Netted caps of this type were in use not only throughout the Maidu area, but also by the Wintun, Yana, and Achomā′wi, and perhaps other stocks.

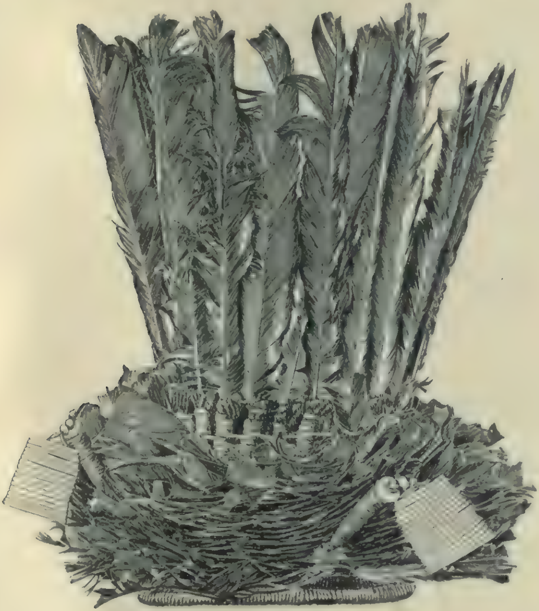


Fig. 30 ($\frac{50}{868}$). Feather Crown.

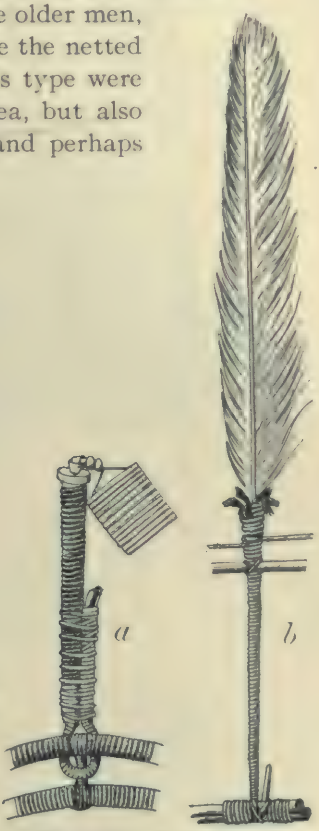


Fig. 31 ($\frac{50}{868}$). Technique of Large Feather Crown.

This cap is everywhere made in substantially the same manner, and consists of a rather closely netted strip or band made of cord. The strip of netted work is from eighteen to twenty centimetres in width, and from forty to forty-five in length. Along either long side (Fig. 33, *b*), a row of cord loops, eight to twelve centimetres long, is added. Through the row of loops on each side a string is passed, gathering all the small loops together; on one side, a strip of buckskin or cloth about thirty centimetres long and two or three centimetres wide is tied to this loop, to the end of which, again, another string is attached about the length of the strip. On the other side the gathering-string forms a loop about thirty centimetres in length. In putting the cap on, it was first rolled lengthwise and placed on the forehead. The hair being gathered in a mass on the top of the head, the strip of cloth is passed through the long loop on the opposite side, and is pulled back. The strip of buckskin is thus brought to the front of the head; and the remainder of the cord is then wrapped tightly about the head, the end being tucked under to secure it. The buckskin strip is then pulled down, covering the cord and the edge of the cap. Lastly the cap itself is unrolled over the mass of hair on top of the head, and allowed to fall straight down behind, the fold standing out on either side of the head like a wing (Fig. 33, *a*). The principal use of the wīka′ was in the dance, when the often elaborate head-dresses were firmly fixed to the head by means of pins stuck through the netted cap and the cushion of hair beneath. In the mountains, where the snowfall was heavy, snowshoes of the type shown in Fig. 34 were worn. The shoes were solidly fixed to the feet, and no heel-play was allowed.

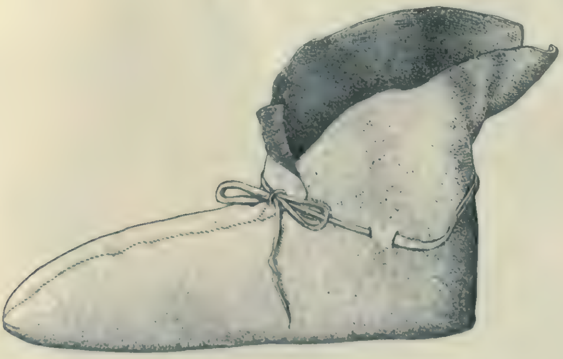


Fig. 32 ([illegible] b). Moccasins. Length, 28 cm.

The costume of the women was little more extensive than that of the men. Although in some cases, particularly in the

Sacramento Valley, the older women went completely nude, as a rule all women wore two bunches or tassels of grass or bark, generally of the willow or maple (Fig. 35). The latter material seems to have been a favorite, the bark being peeled in the spring, dried, and then rubbed and worked till it shredded and split into thin layers in somewhat the manner of birch-bark. The bark, thus softened, was cut into long strips, and formed into bundles, one of which was worn in front, the other behind, attached to a belt either of buckskin or cord. The length of the tassels was in general about forty centimetres. In sitting down, the front tassel was carefully tucked between the legs. In the region of the Northeastern Maidu, somewhat similar aprons were made of

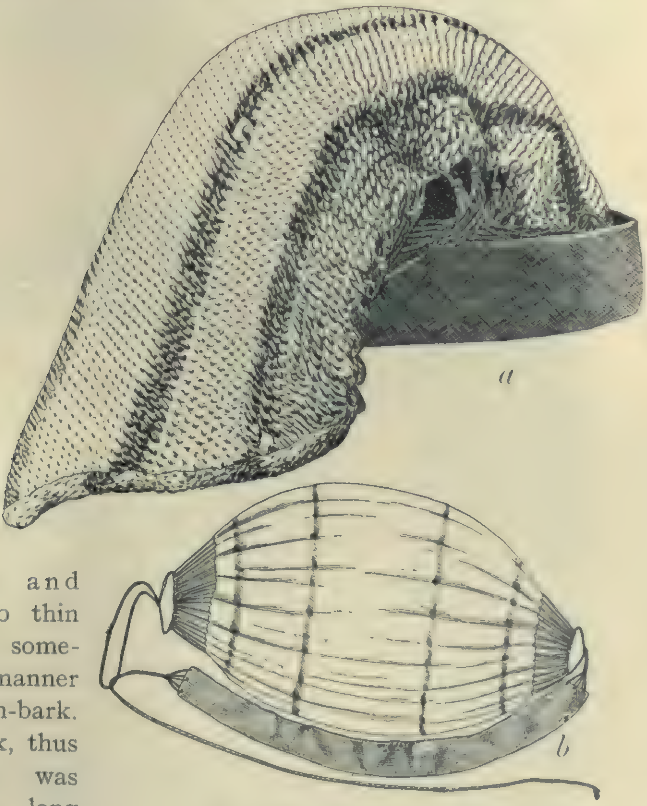


Fig. 33 ($\frac{50}{303}$). **Wika', or Netted Cap.**

buckskin as well as of bark. The buckskin was cut into long narrow strips or cords, and to the ends were tied deer-hoofs, pine-nuts, etc. This style was essentially similar to that in use by the Achomā'wi, although among them the more common form was one where the whole length of the cords was filled with pine-nuts. Skirts of this type were rarely made by this section of the Maidu, and no buckskin ones were made by the Sacramento Valley people. Like the men, women went barefoot except in the mountains, where they wore moccasins similar to those of the men. They also wore similar deer-skin and mountain-lion skin robes in cold weather. As head-covering, they wore almost universally a basket hat or cap, made in many cases of tule or reeds. These caps were in character like those of the Achomā'wi, Yana, Lutuami, and Sahaptin, being flat-topped, and not rounded as were those of the Shasta, Yurok, and Karok, and other stocks of the Lower Klamath River and adjacent coast. They have at present gone entirely out of use.

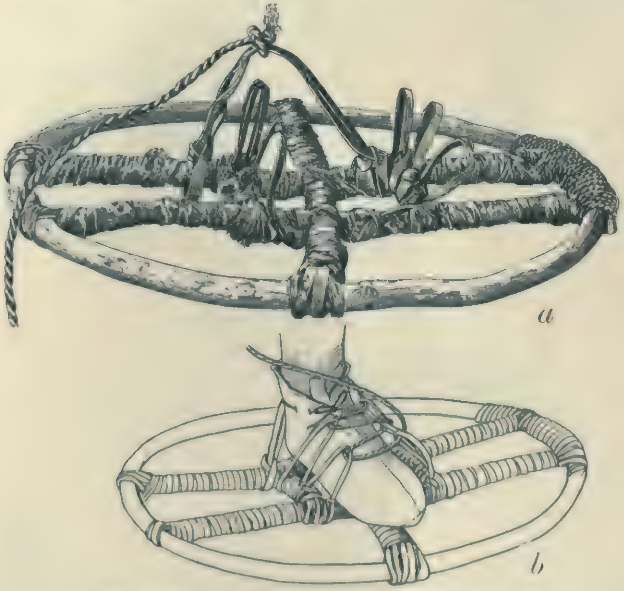


Fig. 34 ($\frac{50}{87}$ a). Snowshoes. Greatest diameter, 45 cm.

The manner of wearing the hair varied somewhat. In the Sacramento Valley, the men wore the hair long, allowing it to hang loosely, or tucked up under the netted cap, or merely held back from the face by a band of fur. The Northeastern Maidu, as a rule, wore the hair long, and allowed it to hang loose, particularly the younger men. In the region occupied by the Southern Maidu, on the other hand, the hair was often tied in a bunch at the back of the head with a cord. Women generally wore their hair long, either loose, or tied by a band passing over the top of the head and under the chin. The Northwestern Maidu, however, seem to have cut their hair rather shorter. In cutting the hair, a sharp flint was often used, the hair being laid on a stick for the purpose. A glowing ember was also used in a similar manner. Both men and women seem to have been particular to wash their heads rather frequently, using for the purpose the common soap-root (*Chlorogalum pomeridianum* Kunth.).

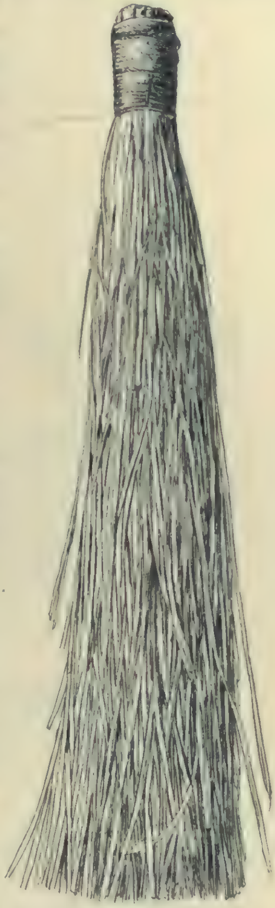


Fig. 35 ($\frac{50}{566}$). Woman's Apron of Shredded Bark. Length, 60 cm.

The men plucked out their usually scanty beard and mustache, either with the finger-nails alone or with the nails and a piece of stick. The mustache was sometimes allowed to grow among the Northeastern Maidu, but was never suffered to become thick or long. The hair on the pubes and in the axillæ was not pulled out. Combs of two or three sorts were in use. Pine-cones were frequently used as combs, also pine-needles in bunches. Perhaps the most common form in the higher Sierra is the porcupine-tail, as shown in Fig. 36, *a*.

Wooden combs (Fig. 36, *b*) are said also to have been made, but it is somewhat doubtful whether they were made before white contact.

The ornaments worn by the Maidu were chiefly of shell, bone, feathers, and wood. Necklaces of beads were much used, and worn chiefly by the women. The beads most commonly used were the ordinary white disk-shaped variety general throughout the greater part of the State. Strings of such beads, often yards in length, were worn by women at dances and social gatherings. Similar strings were looped and wound about the bodies of the dead previous to burial. Cylindrical beads of stone, either white or pink in color, were regarded as very valuable, and were worn in the form of necklaces by such as could afford them. Dentalium was known and worn in strings for necklaces, but was apparently very

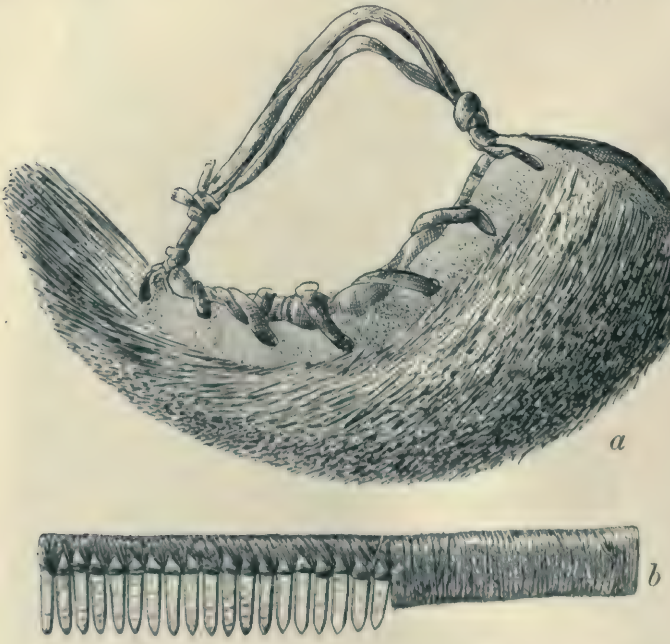
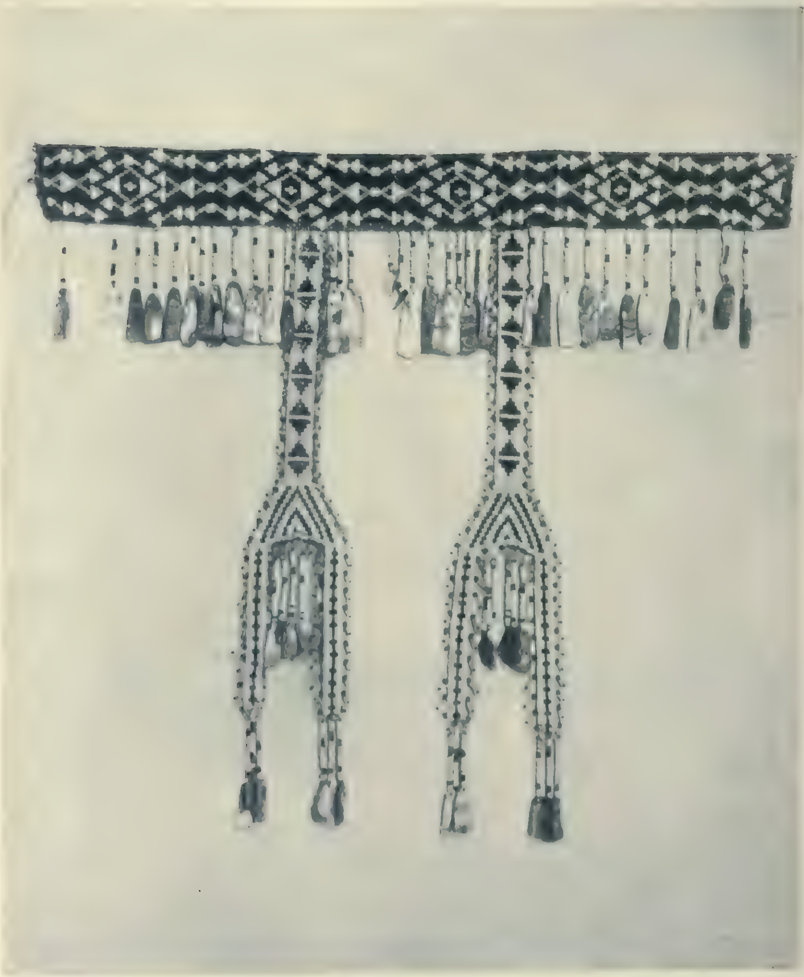


Fig. 36, *a* ([illegible]), *b* ([illegible]). Combs. Length, 24 cm., 20.5 cm.



NECKLACE OF MODERN BEAD-WORK, WITH ABALONE PENDANTS.

rare. Abalone, cut in rectangular or irregular shapes, was made into necklaces, being suspended from cords, or attached directly to the necklace. It was also used for ear-rings. Men often wore necklaces of bear-claws (Fig. 37, *a*), and these necklaces were regarded as proof of the man's bravery and strength. The mourning necklaces, whose use will be described in speaking of the ceremony of the "burning," consisted of strings on which ordinary white disk-shaped shell beads were tied, the beads being arranged in groups, the number and spacing varying at the different "burning" grounds. The pehei′pe, or clown, wore necklaces of acorns (Fig. 37, *b*) which had been bitten by some insect, and "skewed" in their growth in consequence. These abnormal acorns were not very common, and a long and patient search was necessary to secure enough to make a necklace. At the present time, necklaces of glass beads are largely worn by the women (Plate XLII). The use of these beads is rather modern, the Maidu having learned to use them apparently from their eastern neighbors. Abalone pendants are common in connection with this bead-work. Bracelets of beads were sometimes worn, but seem not to have been general.

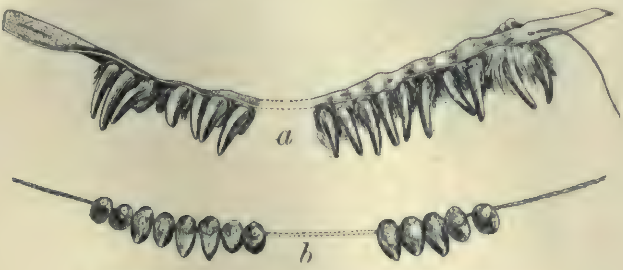


Fig 37, *a* ($\frac{50}{2244}$), *b* ($\frac{50}{2281}$). **Bear-claw and Acorn Necklaces.** Length, 74 cm., 50 cm.

Ear-ornaments were worn by both men and women. The latter seem, however, to have worn them most. One variety was of beads and abalone-shell, strung on or hanging from narrow buckskin thongs or fibre-cords passing through the pierced ear-lobe. Another variety was of bone, generally a bird-bone, decorated with incised designs into which a black pigment was rubbed (Fig. 38, *a*). In some cases feathers, beads, and abalone were added to these bone ear-ornaments (Fig. 38, *b*). In other cases, women wore ear-ornaments of sticks, generally of maple, to which woodpecker-scalps and quail-tips were attached (Fig. 38, *c*). These wooden or bone ear-ornaments were thrust through the pierced ear-lobe from front to back.

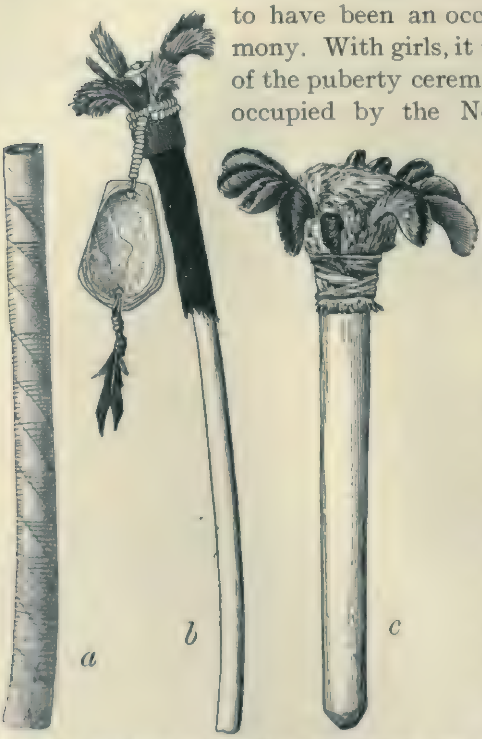


Fig. 38, *a* ([illegible]), *b* ([illegible] b), *c* ([illegible] a). Ear-ornaments. Length, 17 cm., 21 cm., 16.5 cm.

The piercing of the ears does not seem to have been an occasion of much ceremony. With girls, it usually formed part of the puberty ceremonies. In the region occupied by the Northwestern Maidu a breastbone of the perch was always used for the operation, the ear being first rubbed with ashes.

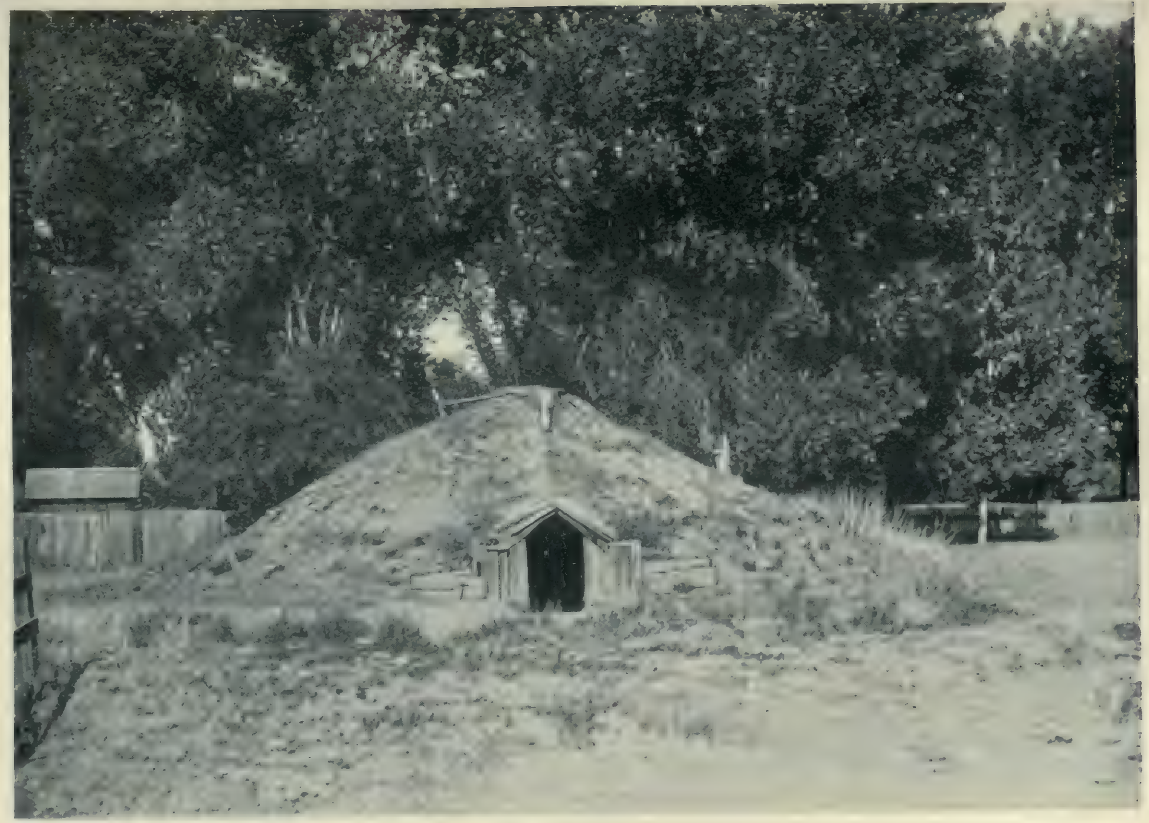
The septum of the nose was pierced only by men; and in the opening the usual ornament was a feather, or sometimes two feathers, one being inserted from either side. Small woodpecker-feathers were commonly used for this purpose. Instead of feathers, some wore a small piece of wood to which feathers were tied. Among the Northwestern Maidu the piercing of the nose seems to have formed part of the initiatory ceremonies into the Secret Society. A sharpened martin-bone was used here for the purpose, and a heavy fee had to be paid to the old man who performed the operation.

The use of paint seems to have been considerable. Except, however, in the girl's puberty ceremonies, it was used mainly at dances. White clay, a reddish clay, or a deep red stone, finely powdered, a species of fungus of a brilliant red color growing on fir-trees chiefly, and charcoal, seem to have been the paints in use. The pigment was mixed with water or grease when wanted. No elaborate body-painting was practised by the Maidu, the paint being applied either uniformly over the whole body, or parts of it, or in rough streaks or dots.

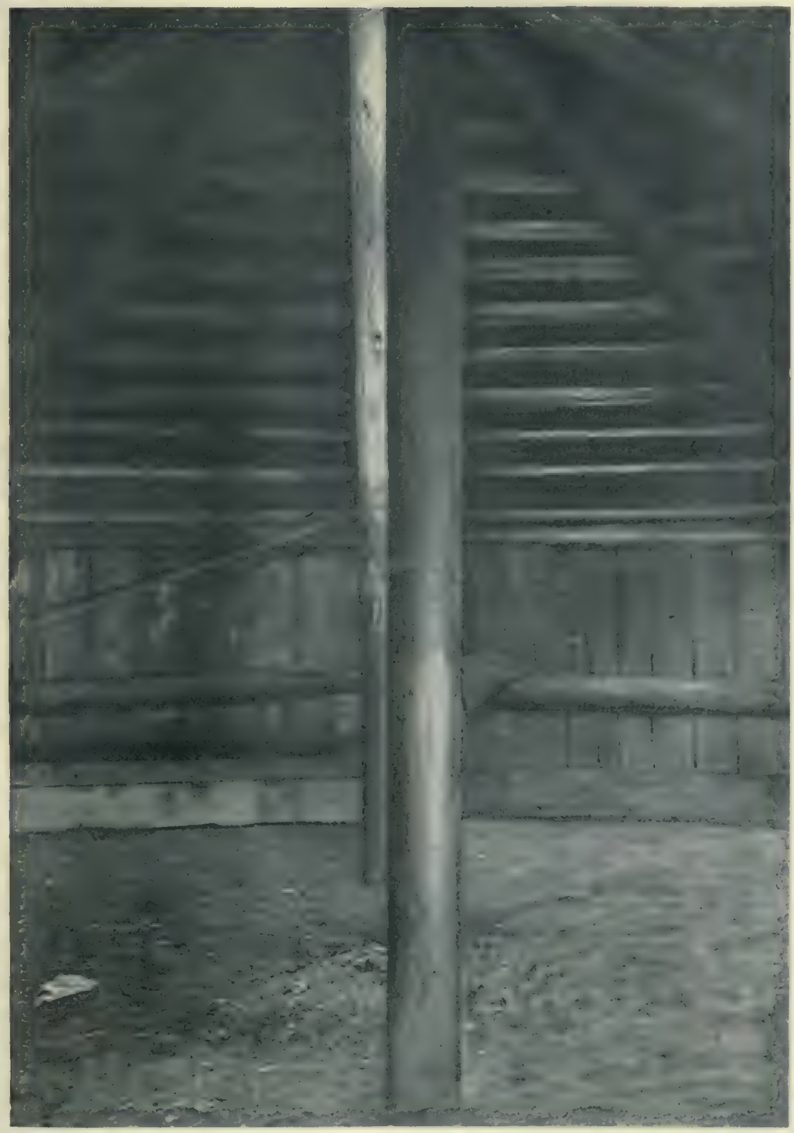
Tattooing was practised perhaps somewhat more commonly among the Northern Maidu than among the southern members of the stock. Women were more often and more elaborately tattooed than men. As a rule, the women had three, five, or seven vertical lines on the chin. In the Sacramento Valley region two marks were also made on the cheeks, running obliquely downward from the cheek-bones toward the corners of the mouth, and lines were also made on the breast. In this section and in the foot-hills, lines or dots were made occasionally on the backs of the hands. Among the Northeastern Maidu, women were not so commonly tattooed as in the rest of the area. Men occasionally had one or two vertical lines on the chin, but more commonly had a single line, about two inches in length, rising vertically from the root of the nose. They also frequently had rows of dots on the breast, arm, or abdomen. It is said that sometimes both men and women had more elaborate designs, such as those called in basketry "flying geese" and "quail-tip." Such designs have, however, not been seen. The method used in tattooing was not always the same. Among the Sacramento Valley portion of the Northwestern Maidu the designs were made by making fine parallel cuts with a small sharp flake of flint or obsidian, and then rubbing charcoal into the cuts so made, the charcoal used in this region for the purpose being obtained generally from the wild nutmeg (*Tumion californicum* Greene). Sometimes a reddish pigment was used, obtained from a roasted and pulverized rock. Designs made in this manner rarely show solid color, and the individual cuts can usually be seen. This method, among the Maidu, is restricted, apparently, to this section alone. It is also in use by the Shasta. The more common method by puncture was used by all the rest of the Maidu people. Fish-bones, pine-needles, or sharpened bird-bones were used for pricking the skin. After the skin was pricked, the pigment was rubbed in, the pricking-instrument being also dipped in the pigment while making the punctures. This process is said to be much more painful than the other; and it is said that serious illness, or even death, has followed its use in some cases. The operation was performed, as a rule, at about the age of ten or fifteen years, and was performed by any one, there being no special persons who were regarded as proficient, and no ceremony apparently connected with the matter. Girls were usually tattooed by an older woman, a relative if possible; boys were tattooed by the younger men.

DWELLINGS AND HOUSEHOLD UTENSILS.—The houses and shelters constructed by the Maidu were of three sorts: (1) the large circular, semi-subterranean, earth-covered dance or sweat houses, used also as regular dwellings; (2) the smaller, less carefully made conical huts, built on the surface of the ground, with little or no excavation, and either wholly without, or with but a partial, earth cover; and (3) the rude summer shelters of boughs and branches.

The semi-subterranean, earth-covered lodge, known as kūm, constituted a type of dwelling widely spread, not only throughout the California area, but also through a large portion of the interior plateaus and the Plains. Of the many such structures built by the Maidu, but one now remains which adheres at all closely to the original type. This single remaining example is located at Chico (Plates XLIII, XLIV). Although the general plan of these structures was everywhere much alike, some differences may be noted in the three different divisions of the Maidu. Among the Northwestern section, the method and plan of construction were as follows: A suitable site being selected, where the soil was soft and no large rocks were to be encountered, an excavation was made to a depth of not over one metre, and over a circular area from six to



The Kùm, or Earth-lodge Dance-house at Chico, Cal.



Interior of Dance-house. Main Post in Background, Front Post in Foreground.

twelve metres in diameter. The ground was loosened by the aid of digging-sticks, and then gathered into baskets, in which it was carried off and dumped, to be used later in making the earth covering. Spring was the season usually selected for building a house, as at that time the earth was soft, whereas later in the summer the ground becomes hard and baked. The excavation having been completed, the posts which support the roof-beams were next procured. These posts, when possible, were of oak, and were cut, brought to the site, and set up with much ceremony (see p. 309). The number of posts varied. In all cases there were, however, two main posts, — one standing behind, and the other in front of, the fireplace (Fig. 39, *b*, *c*). These posts were known respectively as nem südoko or ku'kinim südoko ("great post" or "spirit post") and humpem südoko; and the former, that behind the fireplace, was the more important of the two, and was regarded as really sacred. Near it the chief dancers stood, on it the shamans and spirits pounded with their rattles, and down it into the house the spirits themselves occasionally came. In speaking of the dances and ceremonies, it is this post which is referred to as the "main post" always. On either side of these two posts, and halfway between them and the walls, was generally a row of shorter posts, four in number, thus making ten in all. The two main posts were from three to six metres in height, whereas the shorter posts were from two to three metres. Occasionally an eleventh post was placed back of the main post, but this seems not to have been usual. The sides of the excavation were left vertical, and lined or walled with logs, either whole or split, set on end, or with large slabs of bark, forming thus a solid wooden wall around the interior of the house. From the edge of the excavation, then, the long beams to support the roof were leaned toward the centre, resting on the posts already set, and tied to them securely with grape-vines or osiers. In some cases rude sockets seem to have been made for the beams to rest in; in other cases a crotch-post was used. On these beams as a basis, cross-poles were laid; and on these, again, large pieces of bark, branches, leaves, and pine-needles; and lastly, a heavy covering of earth, generally from twenty to fifty centimetres thick. In the centre of the roof, at the top, an opening was left for a smoke-hole. This was covered, when necessary, by a skin, a basket, or a slab of bark. Directly in line with the two main posts, a doorway was made, less than a metre wide and from one metre to a metre and a half high; and a passage was built out about two metres in length, slanting up from the floor of the house to the level of the ground outside. In the Sacramento Valley area it would seem that these doors opened, as a rule, to the south or southwest. It also appears probable that originally in this region the doors were much smaller, having to be entered on hands and knees, and being really little more than draught-holes, the real entrance and exit being by way of the

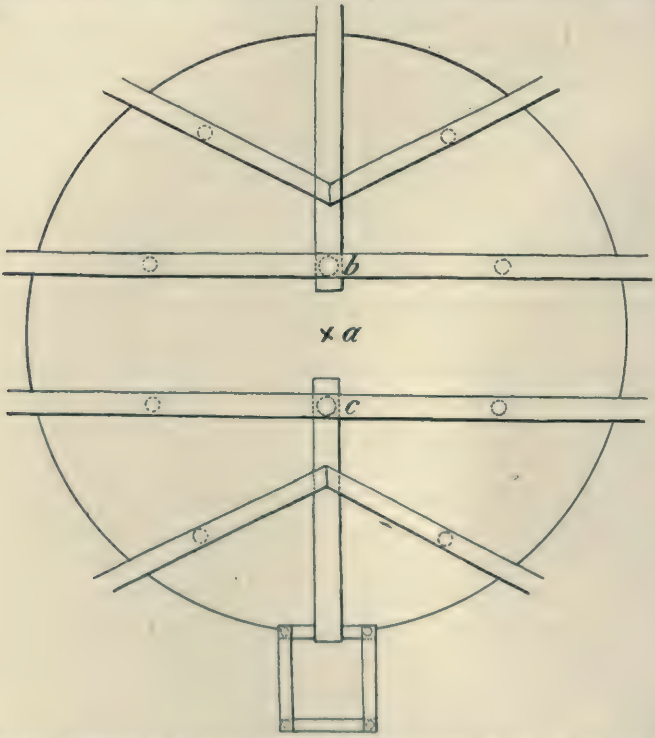


Fig. 39. Roof-plan of the Earth Lodge of the Northwestern Maidu. *a*, Fire; *b*, Main post; *c*, Front post.

smoke-hole. Since the coming of Europeans, however, the door has been enlarged, and the old entrance by the smoke-hole given up. When the latter was in use, however, a ladder composed of two poles, with cross-pieces tied with grape-vine, afforded the means of ascent and descent, and ran almost vertically from the base of the main post to the smoke-hole. In some cases, it is said, a notched log was in use instead of the ladder. It was through the draught-hole, however, that wood was generally carried into the house.

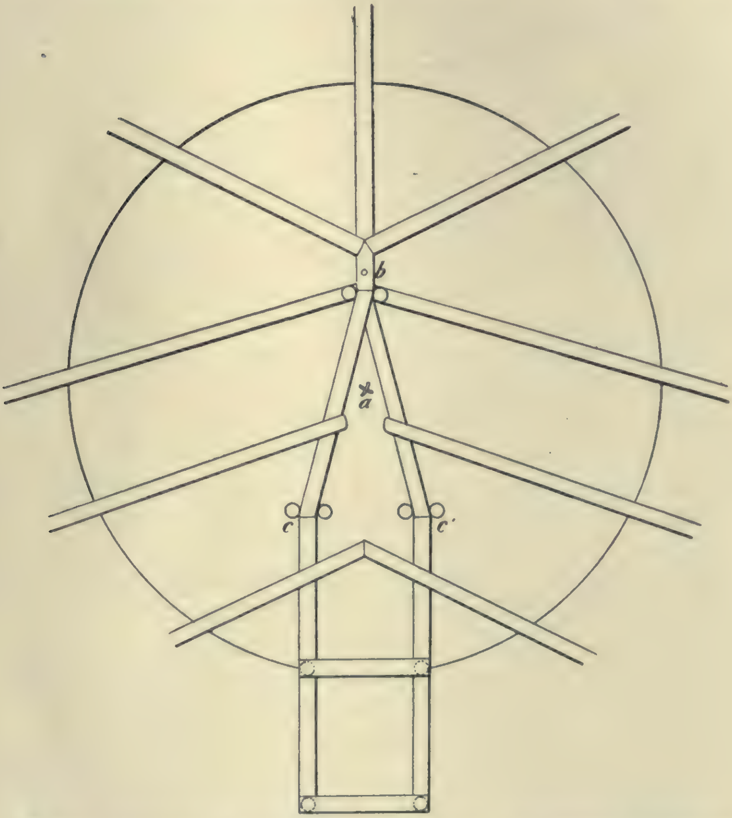


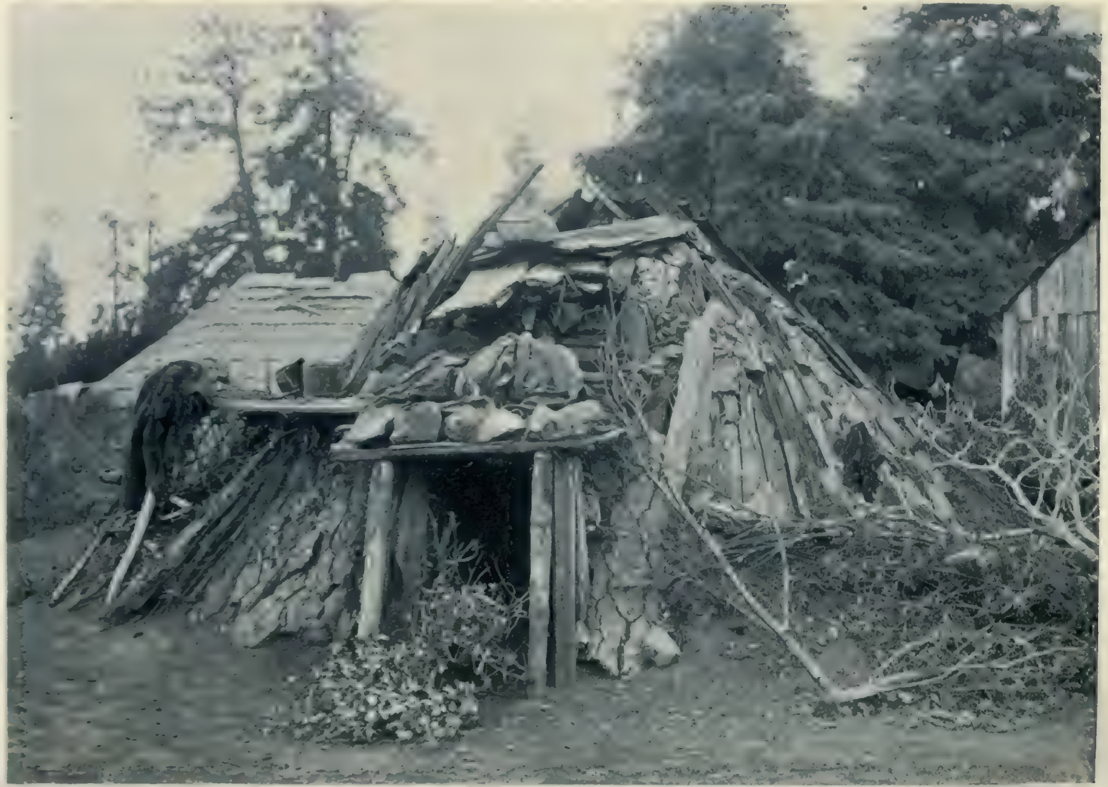
Fig. 40. Roof-plan of the Earth Lodge of the Maidu. *a*, Fireplace; *b*, Main post; *c*, c^1, Front posts.

In the construction of these earth lodges, several families generally took part; and these occupied the house when finished. In the case of the large dance-houses, the whole village seems to have joined, to a greater or less extent; and, since they all helped, all had a right to the use of the house.

Among the Northeastern Maidu, the earth-covered lodge was built in a rather simpler and somewhat different manner. Instead of ten or eleven posts to support the roof, only three were in use in this section (Fig. 40),—one main post (*b*), forked at the top, placed immediately back of the fireplace; and one (*c c′*) on either side, near the door-posts. A large flat stone was always placed upright at the foot of the main post, between it and the fire. Around the edge of the excavation, which is made here in the same manner as before described, logs were laid horizontally; and the radial rafters supporting the roof ran from these logs to the main post, or to the sloping pair of beams running from the main post toward the door. The subsequent steps in the building of the house were similar to those described before; the covering of bark, pine-needles, and earth being placed on the cross-poles which are laid on the main beams. We find here also that the usual entrance was formerly by the smoke-hole, whence a ladder led down to the interior. Women and children often, however, came in by the draught-hole, or door. There was far less ceremony in the construction of the houses in this region than in the Sacramento Valley.

The Southern Maidu appear to have had, as a rule, the same form of earth lodge as that first described, except in the extreme south, where the type approaches the Moquelumnan. In this most southerly portion of the Maidu area, four posts are set up in a square (Fig. 41 $^{1\ 4}$), the sides of which are generally oriented with some care. On the tops of these four posts horizontal rafters or beams were laid, and then to these the radial rafters ran from the edges of the excavation. The main post, so typical of the Maidu houses, is thus lacking here (Fig. 41).

The second type of house, or höbo′, was a much ruder affair than the earth lodge. In its simplest form, an excavation was made to a depth of from twenty-five to fifty centi-



HŎBO', OR BARK AND BRUSH HUT, OF THE SIERRA AND FOOT-HILLS.

metres over a circular area from two and a half to five metres in diameter. Several poles (usually, when obtainable, of second-growth pine) were then leaned together from the circumference, and securely tied in the centre, forming a conical frame. On this frame, branches, slabs of bark, and splinters of wood from large fallen trees, were leaned, and then pine-needles and leaves added; the final touch being given by banking up around the edge, to a height of about one metre, the earth removed in excavating. At one side an opening was left for a door, closed by a piece of skin or a slab of bark. At the apex of the rude conical structure thus constructed, a smoke-hole was left. In this type of house, however, this never served as either entrance or exit. In some cases, apparently, a central pole was erected, and to it the other poles were tied. This form of hut was much in use by the Northwestern Maidu of the foot-hills (see Plate XLV). The Northeastern Maidu had a form somewhat different.

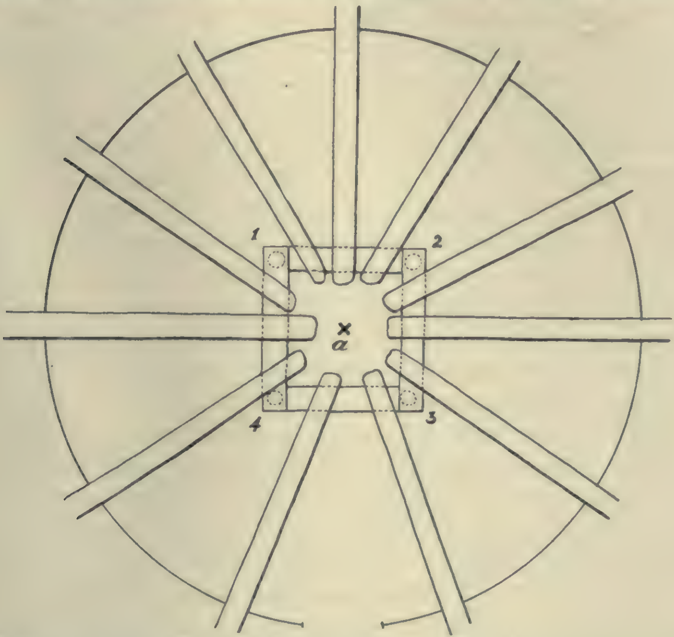


Fig. 41. Roof-plan of Houses of Southern Maidu. *a*, Fire; *1*, *2*, *3*, *4*, The four posts upholding the roof-frame.

Here, after the slight excavation was completed, two poles were leaned together from opposite sides of the hollow made, and securely tied. From their intersection, poles were laid to a pair of slender posts about one metre high, set up a little less than a metre apart, on the circumference of the excavation. On this framework, which was more nearly like that of the earth lodge, the bark, branches, and leaves were leaned and piled, and the earth heaped about the bottom. The door was generally closed by a tule mat or a skin. The menstrual huts used in both regions were similar to the respective types just described, but were even more hastily and rudely constructed, and were also much smaller.

The summer shelter or shade was usually erected close by the winter hut, or wherever the family was camped. It consisted merely of a flat roof of leafy branches of oak or other trees, supported by upright poles. These shade-roofs were often of large size, and generally at least from three to seven metres square. In most cases there were no walls; but sometimes a few small oaks and bundles of branches, or blankets, were placed on the southwestern or southern side to keep out the hot afternoon sun.

The earth-covered lodge seems to have been the traditional and the most common type of dwelling among the Maidu. The earlier explorers in Maidu territory describe this form almost exclusively; and from the myths, and the statements of the people themselves, we may believe that all save the poorest originally lived in these well-built structures. The large houses accommodated several families, each of which had its recognized portion of the interior. It seems that the chief or head man of the village occupied the largest and best house; and that this was sometimes, but not always, also the dance or sweat house of the village. In large villages there was almost always a special structure, larger than the dwelling-houses, for this purpose. The ruder conical hut was neither as warm nor as roomy as the earth-covered lodge, and was by no means weather-proof; yet, in spite of these defects, it seems to have been more common in the foot-hills and mountain region than in the Sacramento Valley.

In the mountains the earth and conical lodges were occupied for four or five months of the year, beginning about November. In the summer time they were practically deserted, the whole population being off in the hills, engaged in hunting. In the Sacramento Valley the occupancy of the earth lodge would seem to have been more continuous; for, while in the summer months the people were living out of doors practically all the time, yet the heavy earth cover of the lodge made it by far the coolest place throughout the period of summer heat, and the men in particular were not slow to take advantage of this fact. The dance-house in particular was a favorite lounging-place.

The sites chosen for the erection of lodges and permanent villages varied considerably. In the Sacramento Valley the villages were usually scattered along near the banks of the larger streams, from the point where they came out from the mountains, to some distance above their mouths. No villages, it seems, were placed at their mouths, or along the Sacramento, as the immediate vicinity of the larger river was one much exposed to flood. Throughout the foot-hills and the higher Sierra, except where occupied by the Northeastern Maidu, the canyons and river-valleys were so narrow and deep that the villages were situated by preference on the ridges, high above the rivers, and generally on small flats on the crest of the ridge, or part way down the canyon-side. The sites chosen were almost always selected with reference to attack and defence; and a slight knoll was, as a rule, preferred. The Northeastern Maidu, occupying the chain of level valleys already described, were free to locate almost anywhere. As a rule, however, they selected sites along the edges of these valleys, and rarely lived out in the middle of the level stretches.

The size of villages seems, as would be expected, to have varied much. In some there were as many as twenty or more earth-covered lodges. In other cases, a village, or, rather, settlement, would consist of but a single lodge.

The interior furnishings and arrangements of the houses were, as a whole, very simple. Usually in the earth-covered lodges there was a low platform of willows, covered with pine-needles and skins, situated on each side of the house. This platform was used for a lounging-place and bed, the inmates of the house sleeping with their heads toward the fire. A pole from ten to twenty centimetres in diameter ran along the edge of the platform nearest the fire, and served as a common pillow for all. In other cases a piece of an old plaque-basket was set up at an angle, and used for an individual pillow. In some instances, particularly in the höbo′ or ruder conical lodge, there was no platform, but merely a thick layer of pine-needles covered with skins and mats, the rolled-up ends of which served as pillows. For bed-coverings, robes woven of strips of fur of the rabbit, wild-cat, etc., or of crow or duck skins, were most prized and used. The earth-covered lodges were, however, so warm, that much covering was not necessary; and the heat was often so great when the smoke-hole was closed, that the inmates of the house slept almost if not quite naked.

Food and property of various sorts were stored in baskets about the edge of the walls, or under the platform occasionally, where this was high enough. In the region of the Northeastern Maidu there was commonly an enlargement or excavation in the wall at the rear of the house; and in this apse-like cellar, food was stored. Granaries or caches for the storage of food were, in much of the region occupied by the Maidu, made by planting poles in a circle about a metre in diameter, and twining willows between them, making a cylindrical receptacle capable of containing from eight to ten bushels. These granaries were used chiefly for acorns and seeds, and were most in use in the Sacramento Valley region and the foot-hills. The Northeastern Maidu made, besides the cellar or storage-cave in the back wall of the house, also small hut-like structures, resembling the conical lodge (höbo′), in which they placed food to be stored. Very large rough storage-baskets were also made, somewhat similar to those in use by the Achomā′wi. In the well-stamped earth floor there were usually one or more flat stones sunk to serve as pounding-stones or mortar-slabs on which to pulverize acorns in stormy weather. Pestles of various sizes and a rough metate and muller completed the list of implements connected with the preparation of acorns and seeds for food. Baskets of various sorts, cradle-frames, nets, fish-spears, and other utensils and implements, were either piled near the walls or suspended from the roof-beams.

Mats of tule and other reeds, twined together by cords, were much used both for beds and for doors. Food was generally eaten in common, out of the cooking-basket in which it had been prepared. Some made use, however, of small globular baskets, with which they dipped out soup or food from the larger vessel, or used the flat tray-baskets for holding meats or fish.

The Maidu, with very few exceptions, had no vessels of wood or stone; and baskets of various shapes and sizes served for all purposes of gathering, storing, and cooking food. For storage-purposes, circular coiled baskets in the form of a truncated cone were most generally used (Fig. 42, *e–g;* Plate III, Fig. 1, Plate IV, Figs. 4, 5, of this volume). These baskets, made as a rule of willow or red-bud, were often of large size, having in some cases a diameter of nearly a metre. They were used chiefly to store acorn-meal, grass-seeds, pine-nuts, and berries. For whole acorns, dried meat, or fish, a more conical, open-twined basket was often used. Food was also frequently kept on large circular tray-baskets of coiled make, similar tray-baskets being often used as covers for the large conical baskets (Fig. 42, *i*, *j*). Smaller tray or platter baskets of this type were used as plates to eat from, and open-twined tray-baskets when eating dried meat or fish (Fig. 43).

In the manufacture of acorn-meal, the milling-basket was used in some portions of the Maidu territory. This form of basket (Fig. 44) was of twined make, and averaged from thirty-five to forty centimetres in diameter across the top, standing about twenty or twenty-five centimetres high. The upper edge was firm and strong; the bottom was open, forming a circle twelve or fifteen centimetres in diameter. In use, the basket was set on the stone slab, as shown in the

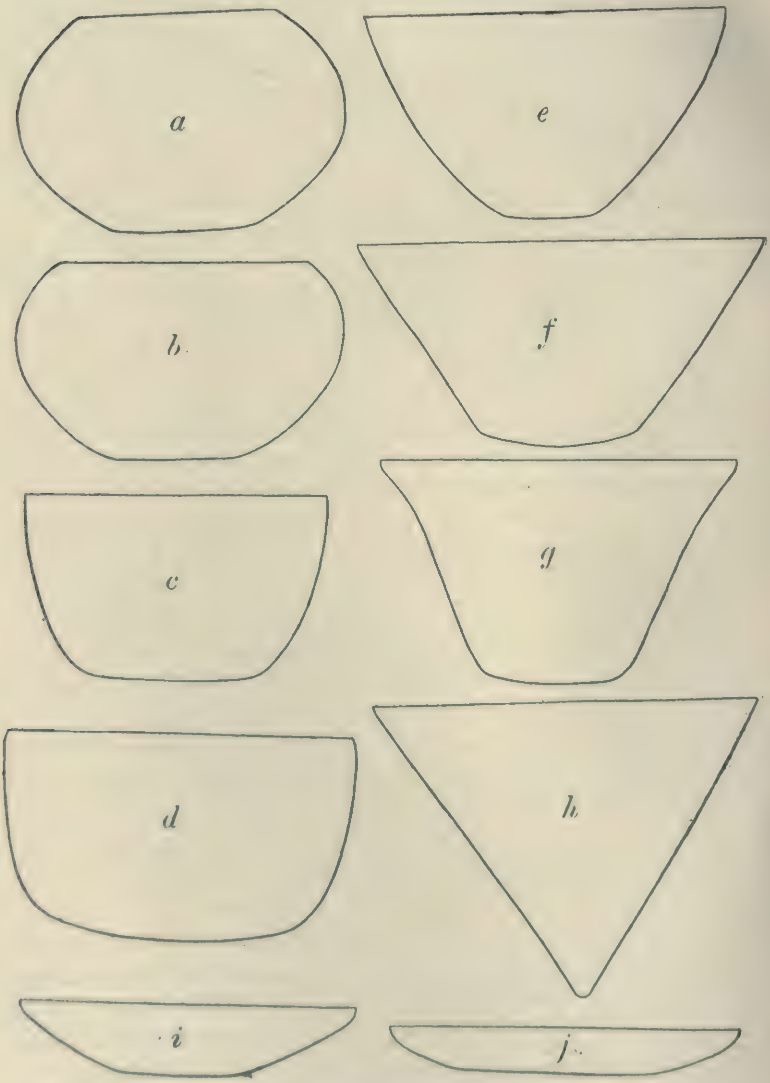

a
e
b
f
c
g
d
h
i
j

Fig. 42. Outlines of Maidu Basket-forms.

figure, and the acorns pounded through the hole in the bottom of the basket, the flaring sides of the basket keeping the meal from flying and scattering at each blow. The meal, once pounded, had to be sifted; and for this a perfectly flat circular tray of coiled make was used. A flattish tray-basket of the ordinary type was also used.

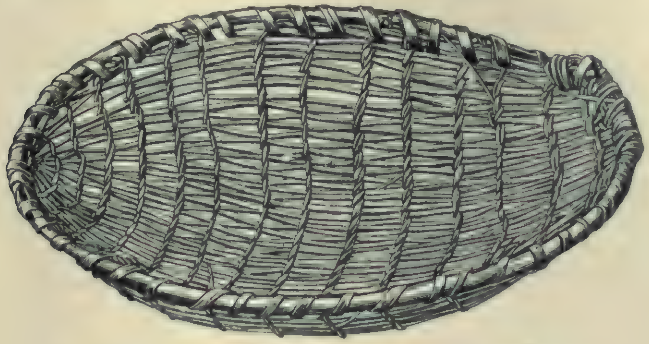


Fig 43 ($\frac{50}{1238}$). Open-twined Tray or Plate Basket. Length, 24.5 cm.

For cooking, several forms of basket were in use. Perhaps the most common was the circular, truncated-conical form, the sides usually convex (Fig. 42, *c–g*). Circular baskets with

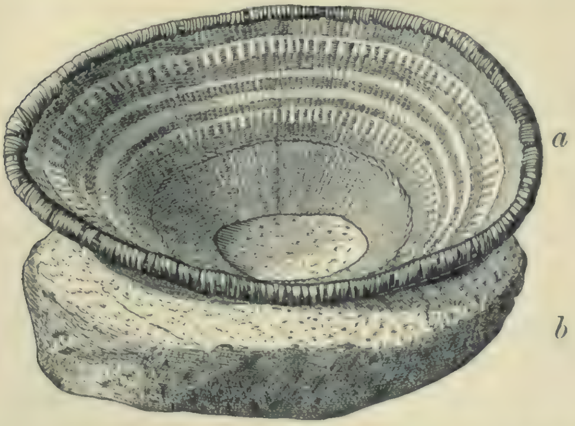


Fig. 44, *a* ($\frac{50}{527}$), *b* ($\frac{50}{290}$). Milling-basket and Mortar Slab. Diameter, 46 cm., 42 cm.

almost vertical sides were sometimes employed. Globular forms (Fig. 42, *a*, *b*) were rarely used for cooking.

Burden-baskets were practically all of the same type (see Fig. 42 *h;* Plate VI, Fig. 4; Plate XI, Fig. 3), conical and pointed, and were invariably of twined make. They were occasionally, but not often, used for storage. Small globular baskets (Fig. 42, *a*, *b;* Plate IV, Fig. 2; Plate XI, Fig. 2) were in use for a variety of purposes, such as food-bowls, dipping-baskets, or work-baskets, in which the women kept their bone needles and sewing thread and sinew.

With very few exceptions, all the baskets made by the Maidu were circular. Oval-globular baskets of small size (Plate XI, Fig. 5; Plate XVI, Fig. 3) were occasionally made, more by the western members of the stock than by the eastern, however. They were used for women's work or as trinket-baskets, and are said sometimes to have had feathers inserted similar to those made by the Pomo. It would seem probable that this use of feathers on basketry was due to Pomo influence.

The Maidu had no mush-paddles for stirring their acorn-soup, making use, for this purpose, of any common stick. They were also without spoons or ladles of any kind, although a mussel-shell was now and then used as a spoon. Acorn-mush as a rule, however, was eaten with the index and middle fingers of the right hand, formed into a shallow scoop. Among the Northeastern Maidu, at least, the hands and face were wiped, after eating thus, on a tassel or bunch of grass twined together at one end.

For tongs to take hot stones from the fire for cooking, two sticks were used. These were sometimes flattened a little at the ends.

In making a fire, the simple fire-drill was in use (Fig. 45). The base, generally of cedar, was thirty centimetres or more in length, from three to six centimetres wide, and two centimetres thick. Notches were cut in the side, and a small hole cut or scraped out at the head of each notch. The twirling-stick was usually forty-five or fifty centimetres in length, and from seven to fifteen millimetres in diameter. Buckeye was used when it could be obtained. The base was held firmly on the ground with the knees, and the twirling-stick rapidly twirled between the hands, the hands being placed at the top, and working down, thus giving the requisite pressure. Grass thoroughly dried, or punky wood, was used as tinder. Fires were rarely allowed to go out; and while travelling, a punky piece of wood, in which the fire smouldered, was always carried.

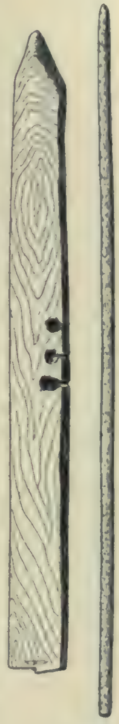


Fig. 45 ($\frac{50}{538}$, a, b). Fire-drill. Length. 59 cm., 69.5 cm.

Food and its Preparation.—The food-supply of the Maidu was large, and included practically everything edible to be found in the region. Vegetable foods were perhaps a little more used in the Sacramento Valley area than in the mountains, where game was rather more abundant.

The chief dependence of the Maidu, in common with most of the Indians of the central part of the State, was upon the acorn. The Maidu recognize about a dozen different varieties of these. In the creation myth it is declared that the Creator's first act, after forming the dry land, was to cause a great oak-tree to spring up, on which grew all the twelve varieties of acorns. Later these different varieties came to grow on different trees. The miraculous tree, however, created by Kō′dōyanpĕ, was still standing, according to old men, at Durham (Ta′doikö) at the time when, in the early '40's, the first settler arrived. The tree was cut down by him in spite of strong protest by the Indians; and it is declared that the stump bled profusely at the first stroke of the axe, and that in the heart of the tree was found a peculiar substance "like a roll of thin, strong paper," from which the blood flowed. The exact spot at which the tree stood is still pointed out.

Although the acorns of all species of oaks growing in the region are eaten, some varieties are distinctly preferred to others. In general, *Quercus Kelloggii* Newberry, *Quercus chrysolepis* Liebmann, and *Quercus Wislizeni* A. D. C., were the favorite species.

Besides the acorn, a great number of other nuts, fruits and berries, were eaten. The fruit of the buckeye (*Æsculus californica* Nutt.) and the wild nutmeg (*Tumion californicum* Greene) were eaten, but required more preparation than the acorn. The nuts of the digger-pine (*Pinus Sabiniana* Dougl.), the sugar-pine (*Pinus Lambertiana* Dougl.), and the yellow pine (*Pinus ponderosa* Dougl.), were very largely used. The nuts of the digger-pine were most used in the foot-hill region, where alone the species grows in quantity, but the nuts were sent in trade to considerable distances. Other nuts, such as the hazel (*Corylus rostrata* Ait., var. *californica* A. D. C.), were collected also.

Of berries and fruits there were many sorts, particularly in the higher Sierra occupied by the Northeastern Maidu. Throughout the area the manzanita (*Arctostaphylos pungens* H. B. K.) grows in immense quantities, and the berries were collected in abundance for use in making the so-called "manzanita-cider." The berries of the snow-brush, sweet-brush, or buck-brush (*Ceanothus integerrimus* Hook. and Arn., and probably also *Ceanothus cordulatus* Kellogg.? and *Ceanothus velutinus* Dougl.?) were used to some extent; and there were also the strawberry (*Fragaria* sp.), the thimbleberry (*Rubus glaucifolius* Greene), the service-berry (*Amelanchier pallida* Greene), the elderberry (*Sambucus glauca* Nutt. and *racemosa* L.), the chokecherry (*Prunus demissa* Walpers), the wild plum (*Prunus sub-cordata* Benth.), the gooseberry (*Ribes occidentale* Hook. and Arn.), the black currant (*Ribes sanguineum* Pursh., var. *variegatum* Wats.), and several others of less importance. Rose-hips of *Rosa pisocarpa* Gray were also eaten.

Roots and bulbs of many sorts were eaten, and, while never a predominant portion of the food-supply, their use gave to the Maidu their early name of "diggers." The following is a partial list of those most used by the Northeastern Maidu, although many were common also to the other portions of the stock: *Allium parvum* Kellogg., *Allium platycaule* Wats., *Brodiæa Douglasii* Wats., *Brodiæa lactea* Wats., *Camassia esculenta* Lindl., *Hastingsia alba* Wats., *Lewisia nevadensis*

Rob., *Lilium washingtonianum* Kellogg., *Polygonum bistortoides* Pursh.

Grass-seed, other seeds, and clover, were also appreciable factors in the food-supply of the Maidu, the seeds being stored in considerable quantities for winter use. The following are a few of the plants so used: *Aquilegia formosa* Fisch., *Madia glomerata* Hook. (tar-weed), *Madia* sp., *Wyethia angustifolia* Nutt.

Early travellers and explorers speak frequently of the fondness of the Maidu and neighboring tribes for fresh clover and a variety of wild pea, and describe them in the Sacramento Valley as getting down on hands and knees in the fields, and browsing like so many cattle. The Northeastern Maidu, in times of want or in early spring, occasionally ate the inner bark and sap of the tamarack pine (*Pinus contorta* Dougl., var. *Murrayana* Wats.). It was, however, more in use as a medicine, because of its marked cathartic properties. The leaves of the fir and cedar were used occasionally to make teas of, but, like the pine-bark, their uses were mainly medicinal. Horse-mint (*Mentha* sp.) and other aromatic plants were used in a similar manner. The "sugar" of the sugar-pine (*Pinus Lambertiana* Dougl.) was eaten in small quantities.

The mistletoe (*Phorodendron juniperinum* Engelm.) was used now and then as a medicine. The tobacco formerly grown and gathered by the Maidu of the Sierra region was *Nicotiana attenuata* Torr.

A large number of other foods of vegetable origin were collected, but, owing to the fact that most of them were gathered by Indians for the writer, they were impossible to identify, as the specimens often consisted, unfortunately, of merely the seeds, roots, or a few leaves, which were insufficient for purposes of identification.

Of animal food there was an abundance. In the mountains, deer, elk, mountain-sheep, and bear were plenty; while in the Sacramento Valley there were great herds of antelope. Of smaller game, rabbits, raccoons, and squirrels were numerous. In addition to the animals mentioned, nearly all others known in the region, such as the badger, skunk, wild-cat, and mountain-lion, were eaten. Only the wolf, coyote, and dog were not used for food, and in the southern section the grisly bear was also exempt. All birds practically, except the buzzard, were eaten, ducks and geese in particular being caught in hundreds at the proper seasons. Lizards, snakes, and frogs were not eaten. Yellow-jacket larvæ were, however, eagerly sought, as were also angle-worms. Grasshoppers, locusts, and crickets were highly esteemed, and in their dried condition were much used in trade. Fish of many kinds were to be had, salmon being caught in considerable quantities in the early days. Eels were a favorite food, and, dried, formed an indispensable part of the winter's food-supply for the foot-hill and valley people. Shell-fish, such as mussels, were to be had in some abundance, particularly in the Sacramento River. Salmon-bones and deer-vertebræ were pounded up and used for food; the salmon-bones being eaten raw, whereas the deer-vertebræ, after pounding, were made into little cakes and baked.

The collection and preparation of acorns for food were among the most important industries of the Maidu, in common with most of the Central Californian tribes. At the time in the autumn when the acorns are ripe, every one is busy. The men and larger boys climb the trees, and, by the aid of long poles, beat the branches, knocking off the acorns. The women and smaller children gather these in burden-baskets, and carry them to the village, storing them in the granaries or in the large storage-baskets in the houses.

The first step in the preparation of the gathered nuts is to remove the shell and dry the meat. This, as well as all other labor in connection with the preparation of the acorn, is done by women only. The acorns are usually cracked by means of two stones, the acorn being placed point down on one, and the butt-end being struck several sharp blows with the other. The acorn is thus cracked in halves, and the shell is then separated from each half by the aid of the teeth. The split meats are then spread in the sun, where they rapidly become dry.

The preparation of acorn-meal from the dried nuts is carried on with or without a mortar or milling basket. Perhaps most commonly this mortar-basket is dispensed with. Selecting a flat rock or bowlder, or using a flat stone sunk in the floor of the house, the woman sits cross-legged, or with legs extended, on the ground, and, in the absence of a mortar-basket, spreads out a couple of quarts of dried acorns in a circle. Holding the pestle in the one hand, she strikes regularly in the centre of this circle, and with the other hand constantly gathers, and sweeps back under the descending pestle, the acorns that scatter with each blow. The pestle is changed from one hand to the other now and then, thus insuring an even pounding of the acorns, and resting the hands and arms. When a considerable quantity of acorns has thus been reduced to meal, the finer flour must be separated from the coarser particles. In this process, several handfuls of the meal are placed on one of the flat winnowing baskets or trays, and are tossed and caught several times. Then, holding the

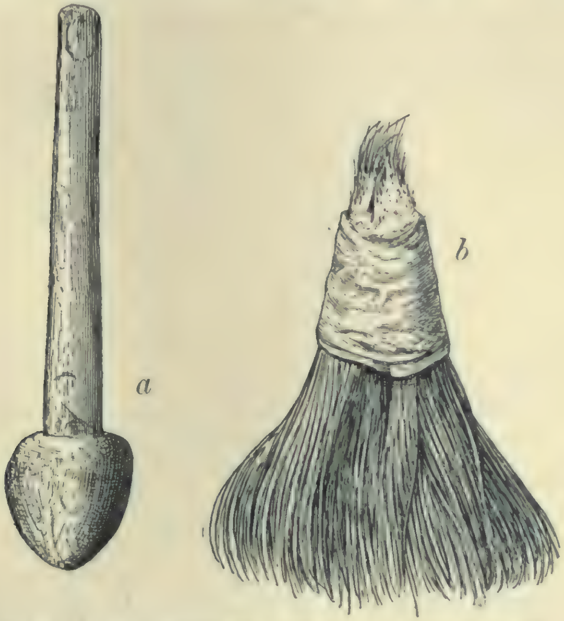


Fig. 46, *a* ($\frac{50}{1816}$), *b* ($\frac{50}{1817}$), Tapper and Brush used in sifting Acorn-meal. Length, 17 cm., 14 cm.

tray on the palm of the left hand, and tilting it at an angle of about 40°, the edge of the tray is tapped with a deer-bone or wooden tapper (Fig. 46, *a*), the tray being slowly revolved meanwhile by the aid of the fingers underneath. In this manner the coarser particles are separated, and roll off over the edge of the tray, leaving the fine flour behind. Sometimes the same result is accomplished without a beater, by holding the tray by the edge, in both hands, and tilting and shaking it dexterously.

In whatever manner the coarser grains are separated, the basket with the fine flour on it is brushed with a brush of soap-root fibre (Fig. 46, *b*), and all the flour brushed off into a soup-basket near at hand. The coarser particles are then thrown back into the centre of the ring of acorn-meats, and pounded again until they are reduced to the requisite fineness, more acorns being added from time to time to keep the mass that is being pounded about the same. The winnowing is likewise repeated from time to time until a sufficient quantity of the fine flour has been prepared.

In case the mortar-basket is used, there is not the necessity of constantly throwing the meal and acorns under the pestle, as these are kept from scattering by the sloping sides of the basket. Otherwise the process is identical.

The flour must next be sweetened by removing the bitter element present. For this purpose a spot is selected where the soil is sandy and soft. Here a circular depression is scraped out to a depth of five or seven centimetres, and the earth heaped up in a little wall round about the excavation. The diameter of these bowl-like hollows may vary from one third of a metre to a metre. The acorn-flour, being first dampened, is carefully plastered over the whole interior of the hollow, the layer of dampened meal being about five centimetres thick. Over this layer of meal a few small cedar sprigs or boughs are laid, so that in pouring on the water the meal shall not be disturbed. Warm water, heated in baskets by hot stones, is now poured gently on the cedar-boughs, and allowed to trickle through until the hollow is filled to the brim. Slowly the water soaks through the layer of meal, and is absorbed by the sandy soil. As soon as the first water has soaked away, a second lot is poured in, this time somewhat hotter; and so on, until finally water at boiling-heat is used. From time to time the woman tastes the flour, until she finds that every trace of the bitter principle has been dissolved out. The sweetening-process is then completed, and the flour is ready for its final cooking.

Taking the dough from the hollow in pieces, the sand adhering to the under side is carefully removed, and the mass placed in a cooking-basket, with the addition of water. For the usual soup the proportion is about two quarts of dough to three gallons of water. The mass is stirred, and then hot stones, taken from the fire with the aid of two sticks, are placed in the basket, till the whole contents is brought to a boil. The soup is then ready to eat, and is taken either hot or cold. A thicker soup, or mush, was made in the same way, only less water was used in mixing. If it is desired to make bread of the flour instead of soup or mush, the dough, after its sweetening as above described, is made into a lump or loaf perhaps fifteen centimetres in diameter. This loaf is then flattened, a hot rock rolled in oak-leaves placed in the centre, and the dough folded over and pressed down all around it. The whole mass is then wrapped in oak-leaves, and placed in the ashes or under a pile of hot stones to bake. The resulting bread is very solid and heavy, resembling almost a lump of putty, and is, like the soup and mush, almost tasteless.

In both soup and bread there is a frequent mixture of sand and ashes, which makes the bread, in particular, rather gritty. The use of the cedar-sprigs in the process of sweetening imparts usually a slight flavor to the flour, which is not disagreeable. In some cases a leaf or two of bay or mint is added to the soup in its final cooking, to give it an added flavor.

The fruit of the buckeye (*Æsculus californica* Nutt.), like the acorn, has to have the bitter principle extracted before it can be eaten. The buckeye fruit, however, requires more thorough and protracted leaching. The "balls" are usually steamed for some time first, then boiled and washed in running water for ten or fifteen hours. The fruit of the wild nutmeg (*Tumion californicum* Greene) requires even more thorough treatment than the buckeye. The nuts are first cracked, and the shell removed. They are then buried in the ground for several months. At the end of that time they are dug up, and roasted in the ashes.

Grass and other small seeds were formerly eaten in considerable amount. The seeds were gathered by the women with the aid of a beater (Fig. 47). One of these (Fig. 47, *a*) is the type used by the Northwestern Maidu; the other (Fig. 47, *b*), that used by the Northeastern. Holding one of these in the hand, the grass or plant heads were struck by it, thus knocking out the seeds, which were caught in a tray-basket held underneath. From the latter the seeds were transferred to the burden-basket on the back. In the region occupied by the Northeastern Maidu the seeds seem to have been fre-

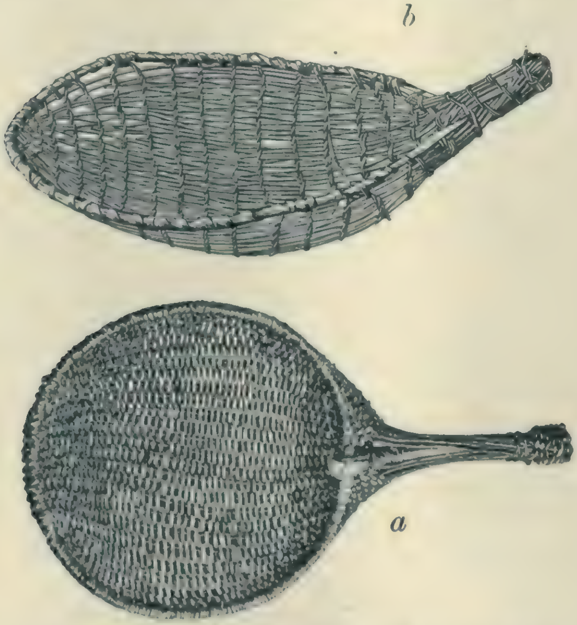


Fig. 47, *a* ([illegible]), *b* ([illegible]). Seed-beaters. Length, 51 cm., 38 cm.

quently ground with water on the rude metates, and either made into a dough and baked in little cakes, or made into a soup in a manner similar to that followed in the case of the acorn-flour.

The seeds of the sweet-birch were thrashed from the hulls when dry, mixed with wild oats, and parched in a tray-basket with hot sand, coals, and ashes, the mixture being stirred to keep the basket from burning. When cold, the sand and ashes were winnowed or blown away, the seeds pounded fine and eaten dry, with no further preparation.

Roots were gathered by means of a digging-stick, usually one metre or more in length, straight, and with the end hardened in the fire. The roots were eaten in a variety of ways, — raw, roasted, or boiled, or sometimes dried, pounded fine, mixed with berries, and baked in small flat cakes.

Pine-nuts were collected in the fall in large quantities, the mountain people trading the sugar-pine nuts to the Sacramento Valley people for digger-pine nuts. The cones of the latter are very large and solid. To extract the nuts, the cones or "burrs" were generally piled in heaps of ten or twelve, and set afire. The pitch burned off in this manner, and the heat partially opened the "burr," which was then crushed by means of heavy stones.

Berries of various sorts were gathered, and dried for winter use; or mashed, made into little cakes with seeds and pounded roots, and either dried, or wrapped in leaves and baked (Fig. 48). To prepare these cakes for use, they were soaked, and then made into a sort of soup. Manzanita-berries are still stored in considerable quantities, and largely used to prepare the so-called "manzanita-cider." The berries consist, when ripe, of a mass of sweet, dry meal, surrounding two or more hard seeds. To prepare the "cider," the berries are first crushed, and then mixed with water to form a stiff dough. A rough frame of willow, large enough to cover the top of a soup-basket, is then made, and cross-strands of bark twined about it so as to form a rude, flat, open-work tray. On this a few large leaves are laid, and the mass of dough placed on these in the shape of a truncated cone from fifteen to twenty centimetres in diameter and from ten to fifteen centimetres high. A small depression is made in the top of the cone, and then the whole affair placed over a soup-basket. Water is poured into the depression in the top of the conical heap of manzanita-dough, and, as it slowly soaks through and drips into the basket below, more is poured in, and the process continued until all the flavor has been dissolved out of the berries. The resulting liquid is of a clear amber color, and has a strong, sweet taste not unlike that of cider. Occasionally the berries are first roasted, with the result that the liquid is darker in color, and has a slightly different flavor. This so-called "cider" has always been the favorite drink of the Maidu, and is still made in large quantities, particularly in summer, when it proves a cooling and refreshing beverage. At the present time it is sometimes strained and bottled, when it ferments and becomes mildly intoxicating. It is also used to make an excellent vinegar. Both of these products are entirely modern, and were unknown before the coming of Europeans.

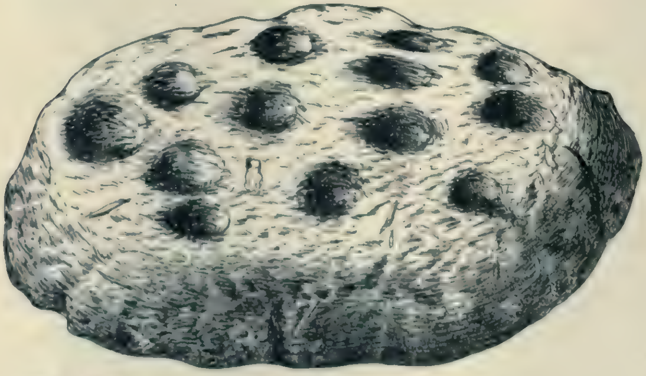


Fig. 48 ($\frac{50}{3331}$). Cakes made of Seeds, Roots, and Berries. Diameter, 15 cm.

Grasshoppers and locusts were eaten eagerly when they were to be had. The usual method of gathering them was to dig a large, shallow pit in some meadow or flat, and then, by setting fire to the grass on all sides, to drive the insects into the pit. Their wings being burned off by the flames, they were helpless, and were thus collected by the bushel. They were then dried as they were. Thus prepared, they were kept for winter food, and were eaten either dry and uncooked or slightly roasted.

Angle-worms were much relished. They were collected in considerable quantities by planting a pole in the ground in a favorable spot, and then working this pole round and round, running around it at the same time, and stamping hard upon the ground. The worms quickly came to the surface, and, when gathered, were generally cooked into a thick soup.

Eels were speared, split, and dried. In preparing them for food, they were usually cut into small pieces, and stewed. Salmon were split, and dried by hanging them over a pole. When thoroughly dry, the fish was usually pounded up till it was reduced to a coarse flour, and kept in baskets. It was eaten dry, as a rule.

Deer and other meat was cut into strips and dried. Usually this was done in the sun; but occasionally a fire was lighted under the drying meat to hasten the process, and to smoke the product slightly.

Salt was used sparingly, but was highly prized. It seems to have been obtained largely from local salt deposits and springs, but considerable is declared to have been brought from deposits of some size near the Marysville Buttes.

The usual methods of cooking meat were boiling, baking, and roasting. Boiling was not much used for meat. In baking, a hole was dug, rocks thrown in, and a fire started in it. When the earth and rocks were thoroughly heated, the fire was raked out; the meat, wrapped in leaves, was placed in the hole, and the hot rocks piled over it. Earth and leaves were then heaped over the whole, and after an hour or two the meat was nicely baked. In roasting, the meat was generally thrown directly on the coals, rarely put on a stick. When bear-meat was eaten, it was the custom to cook it separate from deer-meat, and the two were not eaten together. In the Sacramento Valley a wholly different word is used to denote eating bear-meat, from that indicating the eating of all other kinds of meat.

Hunting and Fishing.—That portion of the Maidu living in the mountains depended much more on game than did the lowland people, and they were much more skilful hunters.

Deer were hunted in several ways. During the rutting-season in particular, a favorite method was to stalk the game, wearing either a whole deer-hide with head and antlers left on, or merely the head and antlers. The antlers, in either case, were usually scraped out hollow to make them lighter. Wearing this disguise, the hunter went to bushy places where deer were plenty, and, by pretending to be eating, attempted to get near enough to the deer to shoot it with bow and arrow, held carefully concealed close against the breast. Deer were also often run down by single hunters, both in summer and winter; in the latter season, the hunter having to rely, of course, on snowshoes.

It was on the larger hunts, in which great numbers of men participated, that the chief development of their hunting-methods lay. Deer-drives of considerable size were held at different times of the year. In some, the men would spread out over a large extent of country, and drive the deer over some steep cliff. More commonly, certain men would be posted at known deer runways and trails; and then, the deer being started up by the beaters, the concealed hunters would shoot the deer as they fled along their accustomed paths. Often fires were set to drive deer. The most important method, however, was that in which drive-fences were employed. It was almost wholly confined to the mountain area. Thirty or forty men were necessary to carry out such a drive successfully. The fences were made of reeds or grape-vines roughly twined together, stretched from tree to tree and between bushes along the mountain-sides, and arranged to cross as many known deer-trails as possible. The entire length of some of these drive-fences was often as much as a mile or more. The fence had usually a number of sharp salients or angles, in each of which was a pit, in which a man was concealed. These concealed men being in place, the others spread out over the ridge, and, slowly advancing, drove the game toward the fence. The deer, reaching the fence, followed it, and, trying to escape at the various angles, were there shot by the men in hiding, or sometimes were merely clubbed to death. Drives of this sort were held only in the spring and fall.

The whole affair was accompanied by much ceremony. Before the drive occurred, all who were to take part in it assembled on the ridge where the drive was to be held. A fire was built, and offerings made to the kŭ'kini or spirits of the mountain, and prayers for a successful hunt were repeated by the old men. The deer were besought not to jump over the fence, or to try to break through it or crawl under it. As the hunt went on, the deer, as they were killed, were brought to the spot where the ceremony was held. The legs of all were cut off, and placed on a small platform built in the branches of a tree near by, and left there till the drive was all over, the affair often lasting several days. During this whole period of the drive, the women and children, who were all left at the village, must observe a variety of regulations. Children had to be very careful: they must not play violently, shout, jump over things, kick, run, fall down, or throw stones. The women also must keep quiet, and stay much of the time indoors. Should these regulations be broken, the deer would become unmanageable, would jump the fence, and the whole drive be unsuccessful. During the whole period of the hunt, no deer-bones must be thrown away, or burned, or eaten by a dog. During the period of the hunt, the hunters ate only the liver of the deer killed. They must also abstain from their wives for some time previous to the hunt, and during it. When the hunt was over, a second ceremony was held at the same place as the first. Similar offerings of food and beads were made again to the spirits and the deer. Then the meat was collected, and equally divided among all who had taken part. The leg-bones were taken down from the platform and divided, to be taken home and cracked for the marrow. The antlers and jaw-bones of all deer killed were hung up on some bush or small tree, at the spot where the animal was killed. This custom applies as well to deer killed by single hunters at any time.

Dogs were at times used to help in these drives, or by single hunters. A good hunting-dog is said to have been highly prized. The dogs used are described by some as being much like the coyote in shape, size, and color. By others they are declared to have been smaller, resembling more a poodle.

In the Sierra region bears were usually hunted in the spring, at the time when they are just about awakening from their period of hibernation. The bear being located in a cave or hollow tree, the hunters, of which there are always quite a party, held before the cave a ceremony, in general similar to that already described as preceding the deer-drive. Several men then took torches and bows and went into the cave. As a result of the ceremony, the bear was supposed not to look at the men. The hunters made an address to the bear, in which he was told that his life had been paid for, and that he must stand up and give them room to shoot. This the bear was then supposed to do, and was accordingly shot in the heart at once. The bear being dead, the arrow was extracted, decorated with beads, and hung to a bush near by.

Grisly bears were hunted only by those who were very fleet of foot, and renowned hunters. The grisly was never attacked except by a number of men together, and in the foot-hill region in the following manner: Four or five men would go in a party, and all but one would hide behind trees or rocks in the vicinity of the bear. One man then went as near the bear as possible, and shot once, or twice if he could. He then ran, followed by the bear, toward the place of concealment of one of the other hunters. Slipping behind the tree or rock, the first hunter would stop; and the fresh runner would instantly jump out, and run toward the place where another man was concealed. The bear would follow this second runner, and as he passed the tree or rock, the first would again shoot at him. The second runner would similarly change places with the third man, who, running toward the fourth, would lead the bear away again. Thus each hunter had time to rest, and to shoot several arrows, while the other men were taking the attention of the bear. By thus changing off, they tried to tire out the bear, and fill his body full of arrows, until he finally succumbed. It was always, however, dangerous sport, and not infrequently several of the hunters were killed.

Elk were usually run down, being followed for days, and finally despatched with bow and arrow. Squirrels and rabbits were shot with blunt arrows; and rabbits were also taken in nets stretched from bush to bush, and upheld by sticks. Into these nets, which stretched for many hundred feet, the rabbits were driven, and clubbed to death at the nets by men stationed there for the purpose, the rabbits generally getting their heads caught in the meshes of the net.

Quail were snared. In their seasonal migrations they pass from the lower to the higher ridges, and back by well-defined little trails. Along either side of one of these runways, a tiny fence of little twigs was built, standing some fifteen or twenty centimetres high, and extending for perhaps two hundred metres. Every five or seven metres an opening, just large enough for a single bird to pass, was left, now on one side, now on the other. In each of these openings a fine hair noose was set, and a few berries scattered on the ground just outside the gate. The quail, following their usual runways, passed between these fences, saw the bait scattered for them outside the openings, and, passing out to take it, were caught by the hair nooses. In this manner scores of quail were often collected in a single day.

Grouse were usually shot. Pigeons were often snared or netted by stretching nets across certain gaps in ridges, through which the birds were known to fly habitually. The eagle was never shot, it seems; as to do so would be sure to bring bad luck, make the bow warp, and the arrows break.

Geese and ducks were caught in several ways. In the Sierra, among the Northeastern Maidu, they were often shot; but a more common method was to stretch a cord across a stream, and hang from it, every foot or two, a noose, held open by a piece of stiff grass. These nooses hung just over the surface of the water, and many birds were caught as they flew. In the Sacramento Valley another method was in use. Three light props of elder from two to three metres long were used to hold vertically a net about two metres wide and six metres long. Three or four of these nets were thus set up end to end, the lower corners of the nets being pegged down by sticks. A long cord ran from the props to a grass-and-bough shelter some hundred yards away. One or more decoy geese were placed on the ground near the net. When the snare was set and the geese alighted near by, the string was pulled by the hunter concealed in the shelter, the props gave way, and the net fell on the birds as they rose, and held them till the hunter could reach them. Ducks were, in this region, also caught with nets in another way. The nets were set on bent sticks from the bank out over the water's edge. When the ducks came to sleep, they touched strings which released the nets, and were caught under the nets as they fell. The cord-and-noose method above described was also in use here.

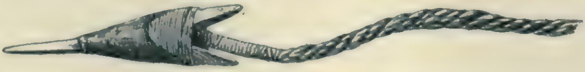


Fig. 49 ($\frac{50}{183}$). Salmon-gig.

Crows were caught in the Sacramento Valley for their skins, which were used in the making of feather cloaks. A low, bushy willow was selected, and in it, at some height from the ground, a small nest or platform was built, reached by a rude ladder. Seated in this nest, a man was completely concealed. Two light sticks, from two metres and a half to three metres long, were then taken, and tied together loosely at one end. These were then spread out like a V, and between the open arms a net was stretched. By opening or closing the V-shaped frame, this net was opened or shut like a fan. One man then hid in the nest in the tree, entering it after dark, and had with him one of these folding-nets. Other men then went about and scared up the sleeping birds, which were driven towards the concealed hunter, who, as the birds passed by overhead, swept out his net, closing the sticks as he did so, and in this way often caught a considerable number of birds.

Eels were speared, and also salmon. In catching salmon, the ordinary salmon-gig is used (Fig. 49), the points formerly being made of bone, but now, as a rule, of a steel-wire nail and a piece of bone or hard wood. The spearing often took place at openings in weirs built across the eastern tributaries of the Sacramento. Salmon, as well as the other fish, were more often, perhaps, taken in nets. In the Sacramento Valley it seems that the same type of net as that used by the tribes of the Klamath River was in use. The method of fishing with these nets is described as follows: A platform being built out over the stream at a point where there is a strong eddy, the fisherman stationed himself there with a long dip-net affixed to poles tied in a V-shape. Across the mouth of the net several strings were stretched. The net being left in the water, these strings were disturbed by the salmon as they entered the net, while resting in the eddy, and the fisherman was thus advised of the presence of something in his net. He at once then pulled up the net, turning it as he did so, to prevent the fish's escape. The fish was then killed with a club. By the Northeastern Maidu another type of net was in use, chiefly, however, for other fish than salmon (see Fig. 13). Here the mouth of the net was held open by an elastic willow wand, a long straight pole being tied to the middle of the opposite side of the net-mouth. The width of the mouth of the net was such that the net stretched across the whole bed of the stream, the bow being uppermost, and the lower side being held down by the pole to the bottom. When fish entered the net, the pole was quickly raised, thus closing the mouth of the net, and preventing the escape of the fish. Fish-traps (shown in section in Fig. 50) were also used, the closed end being untied in order to extract the fish.

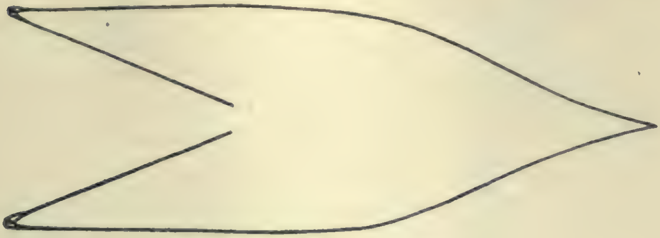


Fig. 50. Section of Fish-trap.

Small hooks of two pieces of bone, tied together and pitched at the joint, were used in fishing, but not to a great extent. Fish were at times stupefied by the use of soap-root, which was bruised, and placed in small pools. This method, however, was not much used. It is claimed by the Maidu in the Sacramento Valley that certain expert divers sometimes caught fish by diving with a stick to the end of which a sinew noose was attached, which could be pulled tight when desired. By cautiously swimming toward a large fish, this noose was said to be slipped over the fish's head, and pulled taut, the diver then coming to the surface with his prize. In this section, also, mussels were gathered by divers.

In the region of the foot-hills there was always some little ceremony at the time when the first salmon of the season was caught. The first salmon had to be caught by one of the shamans, and no one else might fish until he was successful. The fish caught was cooked over a fire built on the spot, and was then divided into many small pieces, one of which, with a morsel of acorn-bread, was given by the shaman to each person. After that, any one might go fishing.

There seem to have been no very elaborate rules in regard to the division of game. If two men shot the same deer, it was evenly divided between them. A man who came in from a hunt (not a drive) divided the meat among all his friends and relatives. The chief got no larger share than any one else.

TRANSPORTATION AND TRADE.—Except on the Sacramento River and its tributaries within the valley region, there was little opportunity for the Maidu to make use of any sort of canoe; for the streams were either torrential in their character, or largely dried up in the summer months. In the valley, however, it would seem, strangely enough, that canoes were but little used. When made, they were but rough dug-outs, broad and flat, the ends being abruptly rounded or square. They were propelled by poles, it is said, almost entirely. Rough rafts were also used. Rude balsa-like rafts of reeds but little over three metres long were used to some extent. In the region occupied by the Northeastern Maidu there is again opportunity — limited, however — for the use of canoes.

Here dug-outs were made five metres or more in length, usually of pine or cedar. As a rule, a windfall was chosen, a section of the requisite length burned off, and the canoe shaped and excavated largely by fire. Pitch was utilized to hasten the process, being spread over the parts that it was desired to burn. The canoes were rather roughly finished, it seems, and were shallow, broad, and blunt-ended. They were propelled by means of rude, single paddles, although poles were much used as well. No reed balsas were made in this section, but simple log-rafts were at times constructed.

Goods of all sorts, and at times even old people or invalids, were transported in burden-baskets. These were carried and supported by means of a tump-line of buckskin or cord (Fig. 51). The strip of buckskin, as a rule, was tied to the basket in two places, by running through loops. The skin tump-lines were unornamented, whereas those of cord were generally decorated in simple designs. Network, covering and holding the basket, like that in use among stocks nearer the coast to the west, was not used here; nor do we find the custom of affixing the four stout sticks to the burden-basket, as among the Achomā'wi Indians to the north.

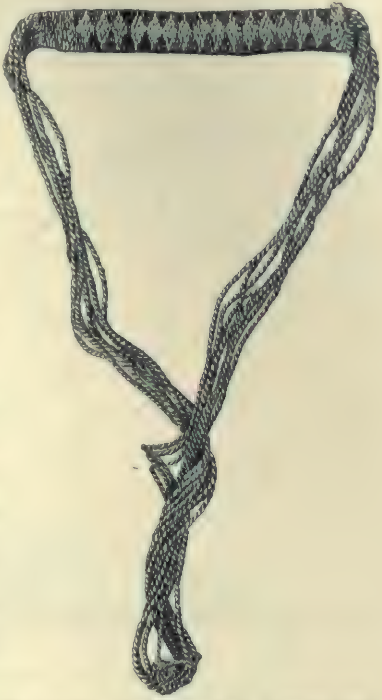


Fig. 51 ($\frac{50}{272}$). Cord Tump-line. Length, 60 cm.

Babies and young children were kept and carried on cradle-frames. The frame was of substantially the same type throughout the Maidu area. In general, a forked stick was selected to form the basis; and across the arms of the Y, cross-sticks were tied, forming a flat surface wider at the top than at the bottom. At the upper or wider end, a shield or screen was added for the double purpose of shading the child's head and of protecting it from accidental blows (Fig. 52). A layer of soft grass or shredded cedar-bark being placed on the frame, the child, wrapped in a piece of buckskin, was laid on this, and securely laced and tied on by crisscross wrappings of buckskin thongs. Thus secured, the child can only move its head. The cradle-frame is carried on the mother's back by a tump-line passing either across the forehead or the breast. This same strap also serves to hang the frame to a tree or to a peg in the wall. The lower end of the Y of the frame is generally some fifteen or thirty centimetres in length, and is sharpened. When the mother is gathering roots or berries, this sharpened end is thrust into the ground, and the cradle-frame is in this manner held upright, the child being kept from harm. The cradle-frame here shown is that used in summer. In winter a similar form is used, except that the head-guard, and also often the pointed bottom end, are lacking. As the child grows, a larger frame is made for it, two or even three frames being made for a child before it is allowed to creep or run about. There was little ornamentation, it seems, of these frames. It is usually customary to make a new cradle-frame for each child, the old ones being kept by the mother or

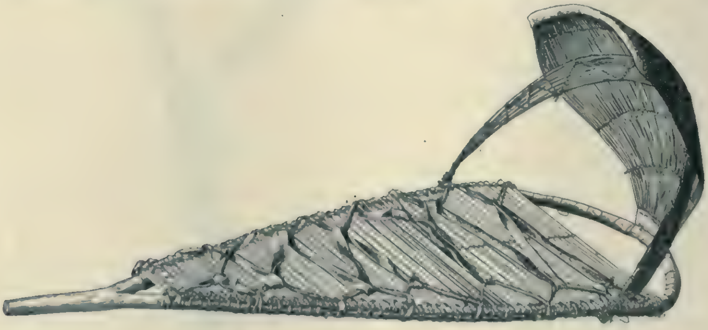


Fig. 52 ($\frac{16}{8925}$). Cradle-frame, Summer Type. Length, 87.5 cm.

hung on some tree. This rule, however, is not universally followed.

The whole Maidu area seems originally to have been crossed by a great number of well-beaten trails, connecting the different villages and hunting and fishing grounds. Every year, usually, the underbrush was burned out by fires started here and there, thus keeping the forest open, and making travel more easy, and ambushing by enemies more difficult. The underbrush being kept down made destructive forest-fires very infrequent, as the annual growth of brush and accumulation of pine-needles were insufficient to set the larger trees afire.

Except on their hunting-trips, the Maidu seem not to have been travellers. They rarely went far from home, even on hunts. It seems that twenty miles was an unusual distance to go, and few went to greater distances from their homes. This restriction of travel was in part due to the rugged nature of the ground, and in part to the hostility of the different villages toward each other. Villages were at times abandoned, it seems; but the move was but a few miles at most, and after several years the original site was often re-occupied. The inhabitants of any one village thus knew only a small section of country, and all lying beyond was *terra incognita*.

In the mountains there was, to be sure, the annual change from the settled winter life in the earth lodges and permanent homes along the streams, to the wandering summer life on the ridges in temporary shelters; but the area traversed in the wandering was very restricted, and each village, or group of villages, guarded very jealously the territory it considered its own.

The Maidu do not seem to have been notable in any way as traders. The Northeastern Maidu traded with the Achomā'wi Indians, getting chiefly beads, and giving in exchange bows and deer-hides. With the Piutes and Washos there seems to have been little trade or intercourse. With the Northwestern Maidu, those in the higher Sierra traded for beads, pine-nuts, salt, and salmon, giving in exchange arrows, bows, deer-hides, and several sorts of food. In exchange the beads were counted, not measured by strings. For each ten beads a stick was laid down as a counter. Tobacco grew plentifully in the region about Honey Lake, and was traded from there quite extensively. The Northwestern Maidu traded chiefly with the Wintun, and the principal article secured was beads. For currency, the circular, disk-shaped shell beads were the standard. As just stated, they were counted, and not measured in strings, but seem always to have been kept in strings. Woodpecker-scalps appear not to have been used as an exchange medium here, as they were so largely on the Klamath River.

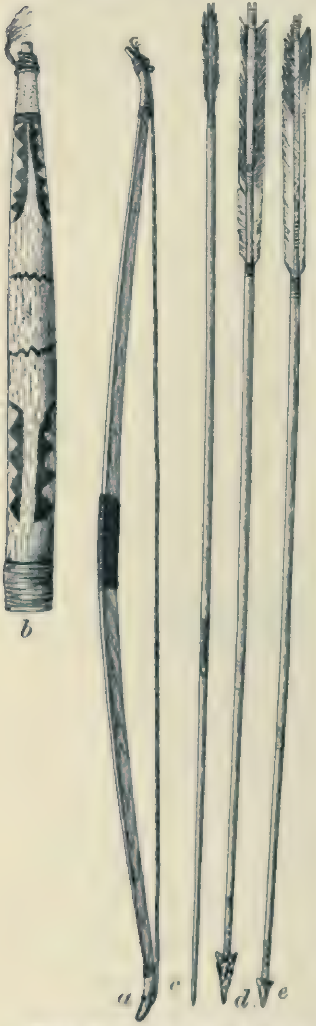


Fig. 53, *a, b* ([illegible]), *c–e* ([illegible], [illegible] a, b). Bow and Arrows. Length of bow, 99 cm.; length of arrows, 82.5 cm., 87.5 cm., 85 cm.

Warfare.—The principal weapons in use among the Maidu were the bow and the spear. The bows made in the mountain sections, where yew could be obtained, were regarded as superior to others, and were quite an article of trade. In type, the bow (Fig. 53, *a*) was similar to the bows of northern California in general. Having a length of about one metre, they tapered gradually from the centre toward each end, being about five or six centimetres wide in the middle. The back of the bow was covered with a layer of sinew, generally the back-sinew of the deer. This sinew backing was prepared and applied as follows: The dried sinew was first chewed or soaked till perfectly soft. It was split and shredded into small strips, and these were carefully and regularly laid along the back of the bow. At the ends they were wrapped about and tied firmly. Each strip or shred of the sinew, as it was put on, was dipped in glue prepared from scraped and boiled salmon-skins. The layer being thus built up of the required thickness, the bow was placed in the sun and carefully dried, great pains being taken that in the drying the sinew layer did not crack. As soon as a crack appeared, it was at once smoothed over, and the sinew pressed together again. When the sinew layer was wholly dry, the bow had to be painted (Fig. 53, *b*). To this end the paint (most commonly a greenish mineral pigment obtained in trade from the extreme northern boundary of the State, or just across it in Oregon) was mixed with salmon-glue, and applied with the end of a feather. As a rule, the bow was wound with a narrow strip of fur or buckskin at the grip.

The arrows (Fig. 53, *c–e*) used were generally made with shaft and foreshaft, but frequently the foreshaft was absent. The shafts were made of several sorts of wood, syringa (*Philadelphus Lewisii* Pursh., var. *californicus* Gray) and rose-bush-shoots (*Rosa pisocarpa* Gray) being preferred. In all cases where the foreshaft was lacking, the shaft was wound with sinew at the point where the foreshaft would have been inserted. The arrows were feathered with three feathers from ten to fifteen centimetres in length. Arrows were painted according to the individual's fancy, and each man painted his arrows in a slightly different way.

Frequently the shaft had sinuous grooves running its whole length. The points were small, and very commonly of obsidian, obtained largely from the tribes to the north. In straightening the shafts, the teeth were employed in the first instance, and then the shafts were rubbed between two grooved pieces of sandstone. There was no set length for arrows: each man made his any length he pleased.

For quivers (Fig. 54), the Maidu used the skins of the wildcat, fox, coyote, young deer, and raccoon. These skins were turned inside out, and suspended by a strap over the right shoulder, the arrows being taken from the quiver by the right hand, reaching over the left shoulder. In war, other arrows were also carried under the arm. Generally in the head-end of the animal, which was at the bottom of the quiver-bag, a cushion of soft grass was placed, to keep the arrow-points from injury.

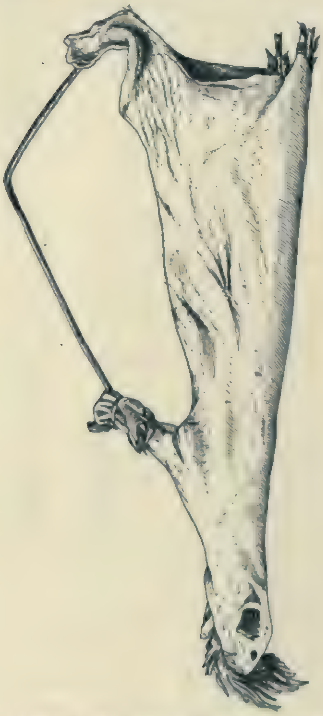


Fig. 54 ($\frac{50}{262}$). Skin Quiver. Length, 87 cm.

In shooting the bow, it was held horizontally, the arrow being grasped either between the thumb and first joint of the forefinger, or between the thumb and the knuckle of the same finger. The arrow, where it lies on the bow, passes between the thumb and forefinger of the left hand.

The spears (see Fig. 2, *b*) in use were rather heavy, with a shaft two metres or more in length, and were exclusively for thrusting. The shaft was usually wrapped with sinew for four or five centimetres, about thirty centimetres back of the point. The latter was commonly of obsidian, from ten to fifteen centimetres in length, and was securely tied with sinew in a groove in the end of the shaft, and still further secured by pitch.

Clubs in the form of simple sticks were sometimes used, and in the region occupied by the Northeastern Maidu there seem to have been a few stone-headed clubs. The sling was very rarely, if ever, employed in war, its use being chiefly in hunting, where it was utilized for killing small birds.

There is some question as to whether the Maidu made use of any sort of arrow-poison. The very general statement is, however, that they did, and the Indians' statements are corroborated by several of the early settlers. The only method described is that which has been attributed to several other tribes in this region; namely, that by means of the deer-liver and rattlesnake-poison. The liver is held on a long pole, taken to a rattlesnake den, and the snakes induced to strike at it repeatedly. When the liver is thus thoroughly impregnated with the poison, it is allowed to decay partially, and is then rapidly dried. The arrow-points are then moistened, and repeatedly passed through the dried mass.

For defence, the Maidu had two sorts of armor, — the elk-hide, and the stick or slat armor. The former was but slightly used, and was merely a stiff, heavy piece of skin covering the body from the shoulders to the knees, suspended from the shoulders by cords. The stick-armor was much more in use, and more serviceable. It seems to have been used more by the mountain people than in the Sacramento Valley. It was made, when possible, of straight round sticks of the mountain mahogany (*Cercocarpus ledifolius* Nutt.), about a centimetre or a centimetre and a half in diameter, fastened together by cords twined in and out between the sticks. The garment was in the form of a waistcoat, with a very high and large collar or neck, particularly in front. So high was the front, that the wearer could just look over it, and then, having discharged his arrow, could sink his head between his shoulders, and thus withdraw it completely behind the shelter of the armor.

The warfare of the Maidu was merely raiding and ambushing. Owing to the lack of any feeling of tribal unity, there was little in the way of combined attack on an enemy on any considerable scale. Several villages, indeed, would at times band together against a common enemy, but apparently these unions were not lasting or of any great size. Warning of attacks was commonly given by means of signal smokes and fires; and attacks were usually made at dawn, or just before. In fighting, great reliance was placed on dodging. The fighters stood with their sides toward the enemy, so as to present a small mark, and kept in constant movement from side to side, dancing about and capering, so that it might be difficult for their opponent to hit them. Prisoners, if men, were usually killed. Women were carried off by their captors, but very often managed to escape after a short time. Many stories of such escapes are told. Slaves were not taken or used. As a rule, the slain were scalped, and, it is asserted, a scalp-dance was held on the return of the party, the scalps being suspended from a pole, while all the visitors and their wives danced about. This dance, however, seems to have been more common in the mountains than in the Sacramento Valley area.

Besides the inter-village enmities, the Maidu had many outsiders to contend against. The Northeastern Maidu were particularly embroiled with the Washo, the Achomā'wi, and the Yana (Kombo). The valley people seem to have had the Yana on the north, and at times the Wintun, as their chief enemies.

In the region of the foot-hills, according to the information obtained by Mr. Spencer, it was the custom to torture captives of the male sex. When captured, they were bound and brought under guard to the camp. If the enemy was still in the vicinity, and other attacks were likely, the victims were held till the affair might occur without interruption. If thus kept, the prisoner was generally placed in the dance-house, securely bound, and no food or water was given him. The torture took place, as a rule, in the dance-house, the prisoner being bound securely to a pole at least ten feet or so in height. In case the prisoner was merely a common man, the torture consisted in burning the body with hot rocks, thrusting burning sticks, previously sharpened, into the flesh, beating with large sticks, cutting off the ears, thrusting burning sticks up the nostrils, cutting off the flesh in strips, and burning the hands and feet.

The body, or what was left of it, was burned. Should the prisoner be a person of note, he was bound to the pole; and only men were allowed to take part in the ceremony. In the case of an ordinary person, women also took part. The lead was taken in the former case by either the shaman or some old member of the Secret Society. All the men stood, armed with bow and arrow, facing the prisoner. The leader then started a war-song, and all began to dance. At a given signal a number of the dancers stopped, and discharged their arrows at the prisoner. They at once stepped back, and another group did the same, group succeeding group till each had shot several times. The prisoner being dead, each man pulled out from the body as many whole arrows as he could, and preserved them for use in war. Such arrows were never used for ordinary hunting. If a person of distinction were killed in an attack, and the body or head could be secured, it was tied to the pole on returning to the home village, and treated as described in the case of the live prisoner.

Smoke-signals would seem to have been used to some extent, holes being dug in the ground and filled with combustibles which produced a dense smoke, which, by narrowing the opening of the hole, ascended in a column to a considerable height.[1]

GAMES AND AMUSEMENTS.—Apart from the regular gambling-games, there were a number of other games in which the gambling-element, while always present, was not so marked. First among these was football. This game seems to have been much more common in the mountains than in the Sacramento Valley, and was played exclusively by men. Two poles were set up about seven metres apart, and four or six players ranged in line with each pole, the players standing from thirty to fifty metres apart, and forming parallel lines. The two end men farthest from their respective goals each had a buckskin ball stuffed with deer-hair, and varying from fifteen to twenty centimetres in diameter. At a given signal each kicked his ball toward his goal, and ran after it. The second man in the line then kicked it on farther to the third, who in his turn kicked it to the fourth; and thus it was passed from one to another, that side being the winner whose ball was first to reach the goal. The game was the occasion of great excitement, villages playing against each other usually; and it was a great favorite when any considerable gathering of

---

[1] See History of Amador County.

Indians took place. There is at present another variety of the game much influenced by football as played by the whites. In this game six players take part. The two goals are erected from fifty to two hundred metres apart; and the six players, three on a side, start with the ball in the centre between the goals, and each party tries to carry or kick its ball to the opponent's goal. There is in this form of the game considerable wrestling.

The women had a game somewhat similar to the men's football, played, however, with different implements. It was played usually by six players, though at times an unlimited number took part. The players had a stick about one hundred and twenty-five centimetres long, with which they tossed either a buckskin rope, plaited of several strands, and usually about thirty centimetres in length; or a couple of sticks, fifteen centimetres long and five in diameter, tied to the ends of a buckskin cord about ten centimetres in length; or a rope or bundle of frayed cottonwood-bark. Two goal-posts were set up, as in the men's football game, and the game was played in the same manner, the rope or sticks being tossed from one player to another by means of the poles. In Big Meadows it is said also to have been played by having the goals a hundred metres apart, two players standing at each goal, and two others facing each other over the rope, which was placed in the centre between the goals. At a signal the two struck at the rope, and thus started the game, one or the other being successful in this first stroke; the rope being then passed on by the other players, who tried to throw it over the opponent's goal. In the Sacramento Valley the game was played with two acorns tied together by a string, and was played only once a year, at the time of the annual burning. The men's football was also, in this region, played only at this same time, and both seem to have had somewhat more of a ceremonial character than elsewhere.

Other games, in which the gambling-element did not enter very largely, were numerous. Men and boys shot at a mark made of a piece of bark cut out round, and set up at a distance of forty metres. They also shot at a small hoop or wicket of wood set in the ground, and rising above it from seven to twelve centimetres. In the Sacramento Valley there was a game played in which a small pebble was batted with a deer's scapula, the winner being he who could bat the pebble the farthest. It was played chiefly by children. No cup-and-ball game, or anything resembling it, seems to have been known. Children played with a "buzzer" and a bull-roarer, but these were not used for any ceremonial purposes. A teetotum of wood was also used by children. Young men and boys also played a game in which they took a long stick and cut notches in it; then, taking a long breath, they tried to see how many notches they could touch before they had to take a new breath. A guessing-game was played by women and children, in which a small piece of twig or grass, about one centimetre in length, was hidden in the second joint of the bent finger; the opponent having to guess, from a scrutiny of the closed fist, in which finger-joint the object was concealed. During this process, the person holding the concealed stick waved the hands about, saying, "Ti′kEl, ti′kEl, ti′kEl!" The guesser, having decided under which finger the little stick was concealed, cried "Tĕt!" pointing at the same time to the finger in question. If the guess were correct, the guesser won a point, and took the object himself to conceal the next time. If he failed, the same person hid the stick again, and he must try once more. Cat's-cradle games seem not to have been much developed, although the women knew several figures. It was played merely for fun, and not, as among the Shasta, more or less ceremonially. No dice-games of any sort were in use.

The favorite game, however, of the Maidu, was, and still is, the so-called "grass-game," played for a stake, and, like all gambling-games, played with great earnestness, and often for days at a time without stop. The game is played in substantially the same manner throughout the Maidu area; and a description of the method in use in the foot-hill region is given here, the variations in use elsewhere being pointed out afterwards.

The implements used in the game are two sticks or "bones" about six centimetres in length, and from one to two centimetres in thickness (Fig. 55, *a* and *b*). One of these (*b*) is plain: the other (*a*) either has a thong or cord tied about the centre, or is scratched deeply in a ring, and this filled with pitch and charcoal. The "bones" are generally made of either a deer or mountain-lion bone, although in the mountain regions they are not seldom of wood. The unmarked bone is known as hi′nduko̤, and the marked as su′lu. In addition to these bones, there are used counting-sticks known as dē′mi. These are nowadays merely splinters of wood, roughly of the same size and length. Formerly they seem to have been made a little more carefully, but not to have been ornamented in any way. The chief variations in the game are in the number of these counting-sticks which are used. In the foot-hill region there are two games in use,—the bōm he′la, or "long game," with sixteen dē′mi or counting-sticks; and the la′da, or "short game," with only ten sticks. Different methods of counting are used in these two games. The method of playing is, however, in all cases the same.

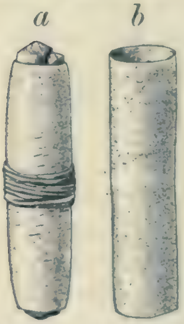


Fig. 55, *a*, *b* ($\frac{50}{188}$ a, b). Gambling-bones. Length, 7 cm., 6.5 cm.

In playing the game, two players play on a side; and, as the game is usually played in the dance-house, two sit at the right, and two at the left, of the door, with the fire between them. Before each pair of players is a pile of dried grass, in which the "bones" are wrapped in playing the game. The stake played for may be anything. It may be given by one of the players, it may be contributed to by all the players, or it may be the result of contribution by the players and the spectators together. In the last case, any outsider or spectator who puts anything into the stake is entitled to the same proportion of the winnings, if his side wins; he having to bet, at the time he contributes, which side he thinks will win. All being in readiness, and the dē′mi being equally divided between the two sides, the game commences. Each of the two players on one side has a pair of "bones." Taking one in each hand, each of the two players begins to sing his gambling song or songs, waving his hands about, changing the bones rapidly from hand to hand, now high in the air, now low down near the ground, now behind his back. He seizes a mass of the dried grass, and, wrapping each bone in a handful of grass, continues to shift and change the bones, singing the while, and swaying his body back and forth and from side to side in time with the rhythm of the song. Both men sing the same song, although sometimes they sing different words. Meanwhile the two players on the other side watch the whole performance with intense earnestness. At last, after perhaps four or five minutes of this preparation, the two players who have been shifting the bones stop, and, holding their hands tightly clinched, and usually pressed tight against the breast, they continue to sing their songs in a somewhat suppressed tone, and sway gently in time as before. Suddenly one of the players on the opposite side claps his hands once, twice, or three times, and shouts, thus designating the hands in which he thinks the marked or unmarked bones are, darting or throwing out his hand or hands violently at the same moment. As each of the two players holding the bones has one of both kinds, it follows that these four bones may be in any one of four possible arrangements. A, sitting on B's right, may have the marked bone in his right hand, while B holds his in the left, the two bones being thus far apart, — on the outside, as it were, of the pair of players; or A may hold the marked bone in his left, while B has it in his right, thus bringing the bones together in the middle; or A may have his marked bone in the left, while B has his in his left also; or each may have the marked bone in his right hand. For each one of these four possible arrangements there are special phrases or cries, and often each arrangement has a dozen or more such. As a rule, the location of the unmarked bones is indicated, although not infrequently the marked ones are guessed, to vary the game. The marked bones, in guessing, are called tĕp; and the blanks wĕ, when they are specified. A complete list of all the cries has not been obtained, but the following will serve to indicate their nature. In the diagrams below, the two players (A and B) holding the bones are seated on the right side of the door, which is thus at their left. The blank bone is shown by an o; the marked one, by a +.

A B
o + + o Guessed as wĕ, hands clapped and spread out.
“ “ yo'no dawā'wa; bōn = blank outside.
“ “ mō'wi = marked ones in centre.
“ “ hō'ni bō'dau = marked near heart.
“ “ ēs'to bō'dau = marked in centre.
“ “ tĕp, and hands clapped and kept together.

A B
+ o o + “ “ dawā'wa, hands clapped and kept together.
“ “ wē, “ “ “ “ “
“ “ hi'nduko “ “ “ “ “
“ “ he'lin hi'ndukō, hands clapped and kept together.
“ “ sē'wi-river.
“ “ sē'wim yō'ēn = river is running.
“ “ hō'nim yō'ēn = heart is running.

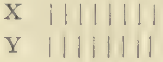
A B
+ o + o “ “ wē, hands clapped, and the right thrown out.
“ “ dawā'wa, hands clapped and the right thrown out.
“ “ hi'ndukö, hands clapped and the right thrown out.
“ “ yā'winai = “I name it,” hands clapped and the right thrown out.
“ “ yai'alsip = whites away from door.

A B
o + o + “ “ dawā'wa, hands clapped and left thrown out.
“ “ wē, “ “ “ “ “ “
“ “ yai'aldau = whites toward door.

In general, although there are two players on the guessing side, only one does the guessing. As long as he is successful, the other keeps still; but, should the guesser prove unlucky, he ceases, and the other partner tries his luck. The guess having been made, the two players holding the bones open their hands, and show which hands the bones are actually in. If those guessing guess wrongly, they throw over two dē'mi. If, however, they guess correctly, both pairs of bones are tossed across the fire to them, and they, in their turn, become the ones who hold the bones, while those who have just held the bones become the guessers. Should the opponents guess correctly the location of one blank bone only, then a single pair of the bones is tossed across, and the side which has just "rolled" or held the bones does so again; this time, however, the single remaining pair of bones being used by one of the players only. If the opponents again guess correctly, this remaining pair of bones is tossed across, and the opponents become the "rollers." If they fail, they have to return the first set, and begin all over again.

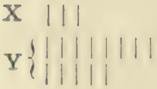
As already stated, the variation in the game is chiefly in the number of the dē′mi, or counting-sticks, with which the points won are counted, and also in the manner in which this counting takes place. In the following diagrams, which represent the "long" game, the eight dē′mi with which each side starts are represented by vertical lines; and the two opposing sides, by X and Y. The original eight counters with which each side starts are called dē′m bü′ssi ("staying or permanent dē′mi"), and the opening of a game would therefore be represented as in Diagram I.

I



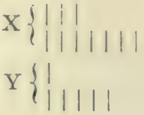
The game being started, X guesses, and twice wrongly, losing thus two points each time to Y; then, guessing once half right, loses one more to Y; finally guesses correctly, and receives the bones from Y. At the end, therefore, of this first stage, X is left with three counters; and Y has gained five, but keeps these separate from the original eight. The counters would thus stand as in Diagram II.

II

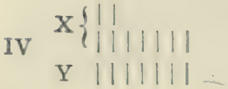


Y now guesses, X having the bones. Y loses two three times in succession; then loses one; finally is successful, guessing correctly, and receives the bones from X. In paying his losses, Y, it will be seen, pays from his original eight permanent counters, not from his winnings, which still remain intact. The condition would now be as in Diagram III.

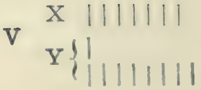
III



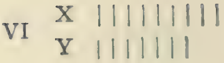
X now guesses, Y having the bones. X loses two, which are paid to Y, and placed by him with his other winnings. Y then passes over to X the one remaining permanent counter still in his (Y's) possession, for, with but one permanent counter left, X could not pay a loss of two. X, therefore, now has all the permanent counters which are left, his own single one, and the one Y had left. Y has now merely his winnings, the game standing as in Diagram IV.



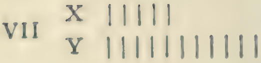
X continues guessing. He loses one, which goes to swell Y's winnings; then guesses rightly, and receives the bones back from Y. The single permanent counter left after he has paid his loss of one to Y, he now hands over to Y again, so that Y may be able to pay part at least of his losses from the original capital. This condition is shown in Diagram V.



Y now guesses, X having the bones. Y loses two, and, in paying, gives X the single remaining one of the permanent counters, together with one of his winnings, which he can now do, as all the permanent counters are exhausted. He then makes a correct guess, and receives the bones from X. The game is now as shown in Diagram VI.



The same result may be brought about, of course, from the state of affairs shown in Diagram IV in other ways; as, for example, X may lose two, and then two again, finally guessing correctly. Under these circumstances, he pays the first loss of two with the two remaining permanent counters, which are thus exhausted. The second loss of two he pays from his winnings; and the affair then, after his correct guess, stands as shown in Diagram VII.



However, the game may arrive at the point where all the original stock of counters is gone: it then goes on regularly, each side paying its losses out of the counters it has, all of which now represent winnings. When, if ever, the number of counters in the possession of either side gets down to three, the opposing side takes the odd counter and gives it to a spectator to hold. If the side to whom these three belong loses two points at the next guess; it then loses not only the two which a wholly wrong guess requires, but also this third, held by the spectator. The purpose of this is said to be, that were all three to be retained, and the normal loss of two be paid, the side would then be left with insufficient counters to pay a loss of two at the next guess. Should the side which holds the bones be willing, however, to use but one pair at the next "roll," then the guessing-side may keep the odd counter; as in such case but a single point could be lost, and it would have enough counters to pay in full, and, moreover have the chance of guessing correctly, and thus, by getting the bones, be able, perhaps, to retrieve its fortunes. In any case, the game is played till one side or the other gets all the counters.

This curious method of preserving the original "capital" intact, and separate from the winnings, is the distinguishing feature of this long game. The short game is played in exactly the same way, except that but ten dē′mi are used, each side holding five to start with; and none of these are regarded as dē′m büssi, losses being paid out of any counters the loser may have, whether they be the original five or winnings, the whole being put together in a common pile. In the Sacramento Valley the number of dē′mi used in the game is but eight, and the long game is apparently not known. The same method, however, of paying, is in use; the four dē′mi which each side has to start with being dē′m büssi, and used to pay all losses from, as described. In the region occupied by the Northeastern Maidu, the la′da, or "short game," is different from that obtaining in the rest of the area. Here the ten counters are, in the beginning of the game, all held by the guessing-side. From these, losses are paid. When the bones change sides, the remaining counters are likewise transferred, and are called permanent counters. The guessers thus continue to pay out of this all losses, till the permanent counters are exhausted, when the losses are paid out of the winnings, as in the long game already fully described. The only difference, thus, between this game and the foot-hill form of the long game, is that the permanent counters are not divided at the beginning of the game, but kept as a single fund, which is passed back and forth as long as it lasts. The sixteen-stick game is also played here, and in the same way as in the foot-hills.

In the foot-hill region the grass-game was often played as follows. A party of men from one village would go to another village to gamble. They would sit down outside the dance-house on arriving, and make sixteen new dē′mi. These being finished, they make up a stake, each member of the party contributing something. One of their number is then deputed to take this into the dance-house. The residents then have to add to this stake an equal amount. The chief of the village then calls in the visitors, who come in, and seat themselves on the side of the house nearest to their own village. The new dē′mi are then divided, and the game begun. None may eat anything till one game has been won.

Women occasionally gamble with bones like those used by the men, only smaller, and use no grass, merely concealing the bones in the hand, and guessing in which hand the blank bone is. They also have a game in which they have a single pebble, the opponents guessing in which hand it is concealed.

In the regular grass-game the players are always in great earnest. The players who "roll" or shift the bones get into a dripping perspiration from the violence of their movements and the energy they put into their singing. The opponents stare with wide-open eyes, and watch every flutter of an eyelid, in their endeavor to determine in which hand the bone is held. Their faces work, they become much excited, and are absorbed, to the exclusion of all else, in the game. Village plays against village, or parties within the village contend against each other; and at times the games continue for twenty-four or even thirty-six hours without a stop, the long game in particular well deserving its name. Into the myths the game enters constantly; and we find great players mentioned, — those who had passages through their arms and body, so that they could transfer the bones back and forth unknown to the opponents, and thus, by cheating, win all.

The myths all speak of the custom of rival chiefs playing for each other's people, the winner carrying the loser and all his people away as slaves, or killing them. We also find rivals playing for each other's eyes and hearts.

The basket-game of the Piutes is not known by the Maidu; nor do they know the many-stick game played in various forms by the Achomā'wi, Shasta, the Athapascans of California and Oregon, and other tribes to the northward.

CALENDAR. — The Maidu divided the year into four unequal seasons, — spring (yō'meni, "flower month"), summer (ka'ukati, probably related to ka'ui, "dust," "earth"), autumn (sĕ'meni, "seed month"), and winter (kō'meni, "snow month"). Spring began with the appearance of the first flowers; summer, with the drying-up of the grass; autumn, with the ripening of acorns; and winter, with the first frosts.

Further subdivision into moons or months was also employed; but in regard to these divisions and their number there is considerable difference of opinion. In the foot-hill region of the northern part of the Maidu area there seems to be a division into twelve moons. The year, as such, begins in the spring, with the first appearance of the tassels on the oaks. The list of moons, with their probable meaning, is given below.

April (?)	wi'nūti (related probably to ū'ti, or "black oak").
May	tēm dī'yoko (said [?] to mean "having fawns").
June	nēm dī'yoko ("big month").
July	ka'ui tso'n po'ko ("ground-burning moon").
August	ĕ'slakum po'ko ("middle moon").
September	ma'tmennim po'ko ("bread moon").
October	ba'paboka (meaning unknown).
November	bo'lyĕ (related perhaps to bō, meaning "trail").
December	sāp (related to either sā, "fire;" or sāpöi, "four").
January	i'nto ("drying up"?).
February	o'mi hi'ntsūli ("squint-eyed rock"?).
March	ko'no ("wife"?).

In the region occupied by the Northeastern Maidu, only nine moons or periods were known, apparently: at least, no others seem to be known at present. These are, beginning in the autumn,—

sĕ′menim po′ko ("seed moon").
tēm tsā′mpautom po′ko ("little-tree-freeze moon").
tetem tsā′mpautom po′ko ("big-tree-freeze moon").
kana′ipinom po′ko ("under-burn moon" [wood burns only underneath]).
bō′mhintsulim po′ko ("squinting moon").
bō′ĕkmen po′ko ("trail-breaking-open moon").
bō′mtetnom po′ko ("sitting-down-along-trail moon").
ko′nom po′ko (meaning unknown).
külo′kbĕpinem po′ko (külo′kbĕ, "old woman"). Old women are said to die in this month from the heat.

ART.

DECORATIVE ART.—As has been said, it is to basketry that we must look to find the chief and almost only expression of the art sense of this people. I have previously discussed [1] the designs found on the basketry of the Maidu, pointing out that, in the decorations of their basketry, they used a considerable number of designs, and that these were, as a rule, much conventionalized, and were somewhat differently interpreted by different individuals. In a recent paper,[2] Professor Boas has pointed out that in the study of the art of primitive people we must recognize two mutually antagonistic principles. It appears, from a wide study and comparison of the art of the tribes of the Plains and Pacific coast area, that we find single designs distributed continuously over considerable areas, but that within the area so occupied the design may have several quite different explanations. On the other hand, we find that certain concepts or ideas are likewise widely distributed over large areas, but that these concepts are expressed artistically in quite a variety of ways. Areas of similar design and of similar concepts may or may not coincide. In the case of the Maidu, there is more or less coincidence apparently. The general type of the designs used by the Maidu is quite widely spread among the basket-making tribes of the Pacific coast, and in a more restricted sense is most marked among the other stocks of northeastern California (the Wintun, Washo, Moquelumnan, Achomā'wi, and Klamath). The order of ideas expressed by the designs, again, is one common to a number of stocks in this region; animals and plants, together with the arrow-point and feather, being the objects most commonly represented.

---

[1] See pp. 2–14 of this volume.
[2] Boas, The Decorative Art of the North American Indians (Popular Science Monthly, 1903, pp. 481–498).

Bead-work appears to be of recent introduction among the Maidu, and little of it is done. The triangle design on the necklace shown in Plate XLII is said to be the "arrow-point."

In feather-work, the Maidu were skilful, and the different types of dance-ornaments made of feathers have already been described and figured. Many of the feathered sticks with their woodpecker-scalps and quail-plumes were really of great beauty, as were also the coronets. Characteristic of the feather-work among the Maidu are the small squares of yellow-hammer quills used as pendants on the coronets and "tremblers" (see Figs. 25, 30, 31). In former times the feather belts would appear to have been much more elaborate than at present.

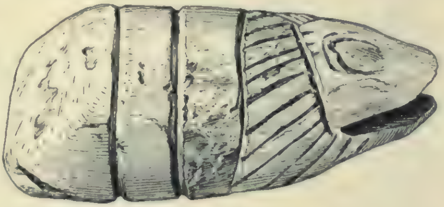


Fig. 56 ($\frac{50}{1584}$). Head of Fish, carved in Steatite. Length, 12 cm.

Decorative art, among the Maidu, finds its expression almost wholly in basketry, and of plastic art and painting there is hardly a trace. But a single specimen of carving has been found in the region. This single object, the head of a fish carved in soapstone (Fig. 56), was ploughed up near Trail Gulch, Spanish Flat, El Dorado County. The Indians in the vicinity regarded the object with some awe, and declared that nothing like it was known to them, but that they had heard of such things as sometimes belonging to shamans. Throughout California in general, carving is very little known, if we except the vicinity of Santa Barbara and the islands off the coast. What carving was done, however, does not seem to show great similarity to the specimen here described. All the stone mortars seen, which were found, or claimed to have been found, in the Maidu region, are without decoration. On the other hand, mortars with incised and other decoration have been found in the Santa Barbara area.

Painting on skin, wood, or stone, seems also almost wholly absent. The decoration of objects, except the bow, with painted designs, was unknown; and no rock paintings or carvings have been learned of in the area occupied by the whole northern portion of the Maidu. The single exception to this rule of absence of painted designs is in the case of the bow. This usually had a design painted on the sinew backing. The design was applied to the finished bow by means of a feather stripped except at the very tip. The pigment used was generally a powdered greenish-blue stone, obtained in trade from somewhere to the northward. The powdered stone was mixed with the same salmon-skin glue that was used in attaching the sinew back. The design shown in Fig. 53, *b*, is from the only bow seen which seemed surely of Maidu make. No explanation of the design could be had from the owner, although the suggestion was made by a by-stander that the figure "looked like a snake." It seems probable that each stock, or in some cases each section of a stock, had its own distinctive designs, which were used on all bows made by members of that stock. Satisfactory evidence has been hard to get, however, on this point, as bows were one of the most common articles of trade, and often are found far from their place of origin. Nearly all the bows of the Sacramento Valley section of the Maidu were made either by the Northeastern Maidu or by the Achomā'wi or the Hat Creek branch of the Achomā'wi.

A single instance of incised designs is that shown on the bone ear-ornament represented in Fig. 38, *a*. This type of ear-ornament seems not to have been uncommon, and all specimens seen were decorated with the same design. It is explained as the "arrow-point," and corresponds quite closely to similar designs found on basketry.

Music. — The musical instruments of the Maidu are few. They are the flute, whistle, drum, rattle, and musical bow.

The flute (Fig. 57, *a*) is a simple elder-wood tube, about forty centimetres in length. It has four holes; and in playing, the end of the flute is placed in the mouth, and blown partly across and partly into. There were many songs played on these flutes; but all were, so far as is known, love-songs, or songs played purely for the amusement of the player, and the flute was not in use ceremonially at all.

The whistle (Fig. 57, *b*) was usually made of bird-bones, eagle or goose being preferred. It was generally double, two being tied together, one longer than the other. The ends were closed with pitch. The whistle, as contrasted with the flute, was a ceremonial instrument, and was used by the doctor or shaman, and by dancers on certain occasions.

Drums were simple, and consisted either of a pit dug in the ground and covered with a sheet of bark, or of a section of a log hollowed out by fire. Both sorts were beaten with the bare feet of the performers, who stood on the drum and stamped.

Rattles were of three sorts, — the split or clapper rattle, the deer-hoof rattle, and the cocoon rattle. The first-named (Fig. 58, *a*) was from thirty to fifty centimetres in length, and usually of willow or other flexible wood. Split for three-quarters of its length, the separate halves were slightly hollowed, and then on shaking, or, as was more common, beating the stick against the palm of the hand, a loud clapping-sound was produced. This type of clapper was most in use in the Sacramento Valley and foot-hill area, and was used

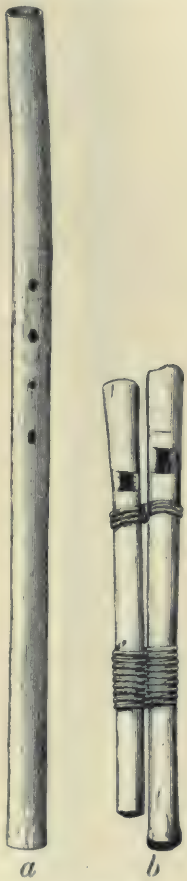


Fig. 57, *a* ($\frac{50}{1813}$), Flute; *b* Bird-bone Whistle. Length of flute, 45.5 cm.

only in the ceremonial dances of the winter season. The deer-hoof rattle seems to have been mostly in use, on the other hand, among the Northeastern Maidu. It was made by tying a bunch of deer-hoofs to the end of a stick from half a metre to one metre long. These rattles were used chiefly by young girls during their puberty ceremonies. The cocoon-rattle (Fig. 58, *b*) was in use in all parts of the Maidu territory: it was made like the deer-hoof rattles, merely substituting the cocoons of *attacus californicus* for the hoofs. The cocoons had gravel or small pebbles in them, and produced a soft, sibilant rustling when shaken. These rattles were used only for ceremonial purposes, and, as a rule, by shamans alone. They were always used while praying to the kŭ'kini or spirits.

The musical bow seems to have been known to all the Maidu. The Northeastern Maidu used the regular hunting-bow for the purpose, and played upon it merely as an amusement, there being apparently nothing that was sacred or ceremonial about it. The Northwestern Maidu, however, at least in the foot-hills, seem to have considered the faint sounds produced as specially suitable for individual converse with the spirits; and in this region, therefore, the use of the musical bow is restricted to shamans. The bow here, moreover, appears to have been specially made for the purpose, the regular hunting-bow not being used. The bow is about a metre and a third long, thus ex-

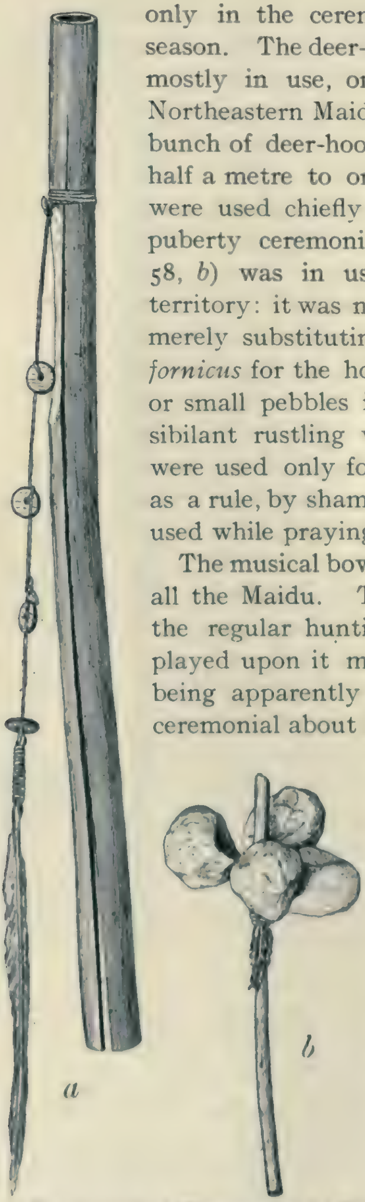


Fig. 58, *a* ($\frac{50}{4}$ a), Clapper-rattle; *b* ($\frac{1}{882}$), Cocoon-rattle. Length, 50.5 cm., 21 cm.

ceeding the regular bow somewhat in its dimensions. When made, the bow was rubbed, it is claimed, with human blood. In playing the bow, it is held in the left hand, one end of the bow being placed in the mouth, the other end extending horizontally towards the left. The string of the bow is then tapped gently with a small twig held in the right hand, and the notes varied by opening or closing the mouth to a greater or less degree, thus increasing or lessening the size of the resonance-chamber.

The vocal music of the Maidu is abundant; and there are many types of songs in use, such as love-songs, puberty-songs, dance-songs, shaman-songs, the so-called "basket-songs," etc.

SOCIAL ORGANIZATION, LAW, AND FESTIVALS.

SOCIAL ORGANIZATION.—The social organization of the Maidu was very simple. No trace has been found of any gentile or totemic grouping. The people lived in village communities, often of some size; and, except for these, there was no definite organization. It seems that the communities were, on the whole, fairly fixed, and that there was little permanent shifting from one to the other. A stay of a year or two was sometimes made in another village, but these absences were more in the nature of visits than anything else.

Each village—or, in the case of small villages close together, each little group of villages—had a head man or chief. The position was in no case hereditary among the Northern Maidu, but seems to have been so among the more southern villages. The chief was chosen largely through the aid of the shaman, who was supposed to reveal to the old men the choice of the spirits. Generally some person of mature years was selected; and wealth, ability, and generosity were strong arguments in favor of a given man's choice. Once chosen, he held his place only so long as he gave satisfaction. Should his conduct be displeasing to the people, he could be deposed, and a new chief put in his place. This was also brought about through the exertions of the shaman, who was supposed to declare the spirits' will in the matter. The functions of the chief seem to have been largely advisory, although a man of strong character and ability generally had what practically amounted to mandatory powers. There seems to have been, as a rule, a rather indeterminate council, composed of the older members of the Secret Society, and with these men the chief was supposed to consult. Apparently the chief often led the people of the village in war, as did the hū′kū, or head of the Secret Society, although a special war-leader was often selected instead, who was noted for his bravery. Among the Northern Maidu, the chief seems not to have fared much better than the other members of the community. He had to hunt and fish as well as the others; and while he received his share of all meat and fish distributed, yet there seems to have been no larger portion given to him, as a rule, than to others. The Southern Maidu, however, particularly along their line of contact with the Moquelumnan people to the south, gave the chief a more important position in this matter. He had his choice of all meat killed, and sometimes there were young men who gave the chief the whole product of their chase at times. In this there was an approximation to the custom among the Moquelumnan people, where the chief was supplied regularly with food by the village. The chief usually occupied the largest house; and where there was no separate structure for use as a dance-house, the chief's large house was often used for the purpose. In any case, he was regarded as having special rights in the dance-house; and at his death it was not infrequently torn down or burned.

Property was both individual and communal. The man owned his nets, bows and arrows, spears, canoes, clothing, and the house he occupied if it was tenanted by one family only. If by several, then the house was owned in common by the heads of these families. The woman owned her baskets, cooking-utensils, and acorn-pestles, etc., mats, digging-sticks, and supplies of basket-materials. Property in land was never individual, but always communal. Each community or group of communities owned its territory in common, including hunting and fishing grounds. In the case of fishing-places, these were, as a rule, common property, and any member of the community could fish there. Certain holes, however, seem to have been private property belonging to families, and no outsider could fish there without the requisite permission. This private ownership in fishing-holes seems to have been a little more common among the Northeastern Maidu than elsewhere. Although the hunting-grounds were regarded as belonging to the community as a whole, yet deer-drive fences erected on that land were held to be the property of individuals or families. Thus any one could hunt alone over any part of the communities' territory, but deer-drive fences could be put up in certain places only by certain families.

The area owned by each community was very definite, and its exact limits were known and marked. Practically the same system seems to have been in force throughout the region occupied by the Northern Maidu. There are definite traditions of meetings held by several different communities to agree upon and mark out these boundaries, and at these meetings marks were adopted to designate the territory owned by each community. In the case of the communities occupying the western part of Butte County among the Northwestern Maidu, there were, according to information obtained by Mr. Spencer, four of these communities or "tribes" which thus entered into an agreement. The Bald Rock people adopted as their mark a crescent with upturned horns; the Bidwell Bar people selected a Latin cross; the people about Oroville took three vertical parallel lines; and the villages near Mooretown and Swede's Flat had a combination of the last two designs. The whole area occupied by this group of four "tribes" was divided by boundary-lines, each section forming a rude square, the corners being marked by the designs of the abutting tribes. The method of marking was to peck or scratch the design into a large bowlder or outcrop of rock. The lines connecting these corners were carefully determined, and, although apparently not marked, their position was known and remembered with exactness. Each tribe or group of communities kept its boundary-lines constantly patrolled by men, who were to see that no poaching took place, and that the rights of each tribe were respected.

These men were, it is said, selected by the chief every week, and two or more deputed to guard each side of the area. The men were chosen for their bravery and steadiness, those who had quick tempers, or had shown lack of judgment, not being thought fit. The men were marked while on duty by a single tail-feather of the magpie, worn upright in the hair. The guards met and exchanged accounts once or twice a day. They were armed with bow and arrow, but only used them as a last resort. Game shot or wounded by a person within his own tribe's territory might be followed by the hunter, if it crossed the line into a neighboring tribe's land, only for a certain distance. If he could despatch the animal within this limit, he was free to take it away with him. Should he fail, or follow it beyond this distance, the guardians along the boundary were supposed to take the meat away. Any person belonging to the tribe into whose land the stranger had thus come could kill such wounded game, and carry it off. The underbrush was commonly burned out every year by each tribe in its own territory, to make hunting more easy. In time of war, these boundaries were said to have been guarded still more carefully; so that, if the attacking party were not driven off, at least an alarm could be given. On the whole, these regulations applied more strictly in the foot-hill region, and the Sacramento Valley area adjoining. In the higher mountains, among the Northeastern Maidu, there seems to have been much less of a system; and game wounded by a hunter could be followed wherever it went, and belonged to the man who was following. This is more in accord with the regulations in force among the Achomā'wi Indians to the north.

Owing to the general custom of burning most, if not all, of the property of a man at his death, there was little that could be inherited. Such things as were not destroyed seem to have generally been regarded as the property of the eldest son, although other children and relatives often shared with him. The rights of fishing-holes and locations for deer-drive fences were inherited in the direct male line.

The division of labor among the Maidu was such that the men did the hunting, fishing, and trapping; built the houses, particularly the semi-subterranean earth lodges; and made all weapons. The women did all the rest of the work, — cooking, preparing hides and clothing, gathering roots and seeds, making baskets, etc.

CRIMES AND PUNISHMENTS. — The regulations in regard to different crimes were few and simple. Theft and murder, if committed on another tribe, were right, and involved no blame. Theft among one's own tribe was generally punished by reprisal if possible, the aggrieved taking something of about equal value.[1] Murder of a tribesman, or indeed of any person, involved usually blood revenge. In the Sacramento Valley region the murderer is killed, if possible, by some of the members of the murdered man's family. If it be impossible to reach him, then any member of his village will be killed instead. If the family of the murdered man are willing, the revenge may be compounded for by a payment of beads, etc. In case the affair lies between two villages, then a party from each side dresses as if for war; and they then meet, and sit down to a conference, at which the amount to be paid is discussed and settled. In the foot-hills the same general customs were in force. There was a distinct effort, in attempting to revenge a murder, to kill the offender in exactly the same way as he had killed the victim in the first place. If he had used bow and arrow, the avenger would also; if he had used a stone or club, so would the avenger. Moreover, the wound was made, if possible, on the same part of the body. Among the Northeastern Maidu the usages were similar. The murderer had to fast for a week or two after killing a man, eating no meat or acorns. Money-payments were made; but, even after payment, blood revenge was often taken as well. If a woman were killed in an attack on a village or in any encounter between two opposing parties, the aggressors usually gave one of their women in exchange, to prevent further reprisals. This held true also in times of peace, the offender, by thus sacrificing a wife or child, sometimes escaping the blood revenge.

Oaths of any sort were unknown. The worst that could be said to a person was to wish that a snake might bite him. Lying was regarded as very reprehensible. The foot-hill people had a saying to the effect that "the man with a crooked tongue is like the man with a crooked arrow."

---

[1] Theft, if unpaid for, gave the right to the aggrieved to kill the thief.

SOCIAL GATHERINGS AND FESTIVALS.—Gatherings of a social as distinguished from a ceremonial nature were common. One village, or a man in that village, would invite other villages to a feast, or, as it is generally called, a "soup dinner." When it had been decided to hold such a festival, the shaman, as a rule, was requested to prepare "strings." These were cords on which a number of knots were tied, the number corresponding to the number of days between the time of sending out these "strings" and the date of the festival. As many strings were prepared as there were families that were to be invited; and when all were ready, they were sent out by messengers, who distributed them to the different families asked. Each day the head of the family untied a knot, or cut it off; and thus all knew when the time had come, and all arrived together. Such notices were usually sent out one or two weeks in advance. At these festivals the chief amusements were gambling, and games of various sorts; and abundant supplies of acorn-soup and mush were provided. This was supplemented by other kinds of food; and after a couple of days of feasting and merry-making, the guests went home. The season most favored for such gatherings seems to have been the summer months; for in winter the food-supply was less abundant, and indulgence in any games except the gambling-games was impossible.

BIRTH, PUBERTY, MARRIAGE, AND DEATH.

Following is a description of the former customs relating to periods in the life of the individual, as told by the Indians.

BIRTH.—During the period of pregnancy, both husband and wife have to observe considerable care in all that they do. During the latter part of the time, neither must eat meat or fish, the husband must not hunt, and the woman stays much at home. When the time arrives for the child to be born, the woman, among the Northwestern Maidu, goes to the menstrual hut, and is there delivered. Generally she is assisted by one or two old women. Immediately the child is born, the woman takes a large stone, warms it in the ashes, and, lying on her back, places the stone on her abdomen. She keeps the stone there, and remains thus until she leaves the hut. In the foot-hill region the menstrual hut does not seem to be used for the purpose of child-birth, the woman merely going off with an old woman to help her, and giving birth to the child at some distance from the village. She is delivered in a sitting position. Often hot teas of various herbs are given to hasten delivery. In the area occupied by the Northeastern Maidu, the child is born either in the ordinary house, if in winter, or in the summer shelter if the weather is warm.

In all cases both husband and wife have to observe strict regulations at the time of birth and for a varying period thereafter. In the Sacramento Valley region, both must fast, abstaining from meat and fish for five days. During this time the husband has to remain with his wife in the menstrual hut. After the five days are over, both go to the river and bathe, then return for five days more, when, after bathing a second time, their purification is over. In the foot-hills, the husband and wife fast similarly; but the husband does not remain with his wife, merely staying quietly at home, and not going out hunting at all. The period here seems to be less definite, lasting till the woman is able to walk about easily. For the woman the period of such fasting ceases with the flow of discharges. The Northeastern Maidu have similar regulations, the fasting and specified diet being the same as that for girls at the time of the puberty ceremonies, and lasting for both man and wife until the umbilical cord drops off from the new-born child. When this occurs, both man and wife bathe, and are then able to take up their regular life.

The child, immediately after birth, is taken by an old woman, or by the mother if she is able, and washed with warm water. This washing is done repeatedly by the Sacramento Valley people, and less often by the others. The umbilical cord is cut with a sharp shell, and ashes mixed with pounded shell, rubbed on the cut. When the cord drops off, it is, among the Sacramento Valley people, simply thrown away, it is said. In the mountains, however, it is carefully preserved, and tied to the cradle-board on which the child is placed. The after-birth is carefully buried, as a rule, so that no animal may eat it. Most of these customs have gone out of use.

A still-born child entailed much more strict observances. The period of fasting and dieting was prolonged to a month for both man and wife in the foot-hills, after which time the man might take up his regular life again. The woman, however, had to remain in seclusion, and continue her fast for at least three months. In the area occupied by the Northeastern Maidu, both husband and wife had to go off alone into the mountains, and stay for a couple of months, fasting, bathing, and keeping very quiet. The woman had to stay some time after the man was allowed to return. The body of a still-born child is buried at once. If it is buried face downward, it is believed that the mother will ever after be barren.

Except in the foot-hill area, there seem to have been no especial beliefs in regard to twins. No particular observances were necessary, and it does not seem to have been customary to kill either or both. In the foot-hills, however, the birth of twins was regarded as an exceptionally bad omen. The mother was often killed, it is said, and the newly born children either buried alive with the mother's body or burned. It was thought by the Northeastern Maidu, that, if the father wore two caps (wīka′) at the time the child was conceived, twins would be the result. Barren women went to a certain rock which bore some resemblance to a woman with child. By touching this it was thought they would be sure to conceive. Abortion is said to have been very rare. When practised, it was by means of pressure.

Names. — In the names given to children, and the number of names, there seems to be considerable variation in different parts of the Maidu area. In the Sacramento Valley region about Chico, names are said to be given to children by their parents when the children are about one or two years old.

These names are usually those of some relative long dead, or of some friend. When a boy enters the Secret Society, he receives another name, this time from the chief. For this name the boy's parents have to pay handsomely, and this name is also said to be, as a rule, that of some person who has been dead some years; but in this instance the person must have been a member of the Society.

In the foot-hill region the names of children seem to depend largely on some incident occurring at the time of their birth. Thus, if a boy were born on a snowy day, he might be called "Snow-Man." Many children are not given any names while very young, being merely addressed or spoken of as "child," "baby," or "boy," etc. Later, when the child is old enough to give some evidences of his characteristics, he is given a name which describes these, or some trick of manner or habit. For instance, a boy who snores while sleeping may be called "Snoring-Bird." Girls were similarly generally named from some characteristic, as "Running-Girl," or "Climbing-Girl," etc. These names were usually given by some relative. In the case of a boy, the mother and father continue to address him all his life by his child name; *i.e.*, by the term simply of "boy." In the case of girls this is not so. The family term for her varies as she grows older, changing first at puberty, then at child-birth, and finally again in old age. In speaking to a person, it is not customary to use the name which is descriptive of his personal characteristics. There is still considerable reluctance felt about telling names and their meanings. The two following may serve as examples of names of men: So′koti ("Cocoon-Rattle"), Dō′mem ("Shady-Water" [?]). On entering the Secret Society, all men receive new names, which are given to the new members by the older ones. The following may serve as examples: Vomiting-Baskets, Wing-tied-up, Licking-Deer, Defecate-in-the-River, Pine-nut-Eater, Stick-it-in-the-Ear, Licking-Head, Mother's-Stomach.

In the higher valleys occupied by the Northeastern Maidu the customs are as follows: The child receives a name generally at about the age of two years. Until then boys are simply known as "boy," and girls as "girl." The names, when given, are generally those of ancestors or deceased relatives. The names of the dead may not be mentioned for a year, but after that may be given to children. Owing to the weakness of the Secret Society in this region, there seem to be no new sets of names given later in life. The names seem to be chiefly descriptive of some personal feature or characteristic.

PUBERTY.—Puberty ceremonials are held only for girls among the Maidu, although in one sense the initiation ceremonies of the Secret Society may be considered as puberty ceremonies for the boys. Inasmuch as, however, these initiations may occur at any age up to middle life, it seems they should not be regarded as puberty ceremonies proper. As the usages vary considerably in the different portions of the Maidu area, I shall consider the different forms in order, beginning with those in use in the Sacramento Valley region.

At the time of a girl's attaining puberty, she notifies her mother of the fact, and the latter at once communicates the news to all the relatives and friends. That evening all these friends and relatives, men and women, assemble at the girl's house. The fire is covered with ashes, and all present gather in a ring about the fireplace, sitting on the ground. Each person holds two stones, which they beat together in time to the songs sung. The girl herself sits alone, and some distance apart from the others, in the northwest corner of the house, covered over completely with mats and skins. No man or boy may come near her. The whole gathering now begins to sing, beginning always with the "grasshopper-song." Other songs follow this, in which the different roots, seeds, and food-products gathered by women are mentioned. A mistake made by any singer causes him or her to be sent out of the house at once. These songs are kept up throughout the night; and then at dawn all go out, and, standing on the top of the house, sing the final song, "Elaki yā'mandi lai'dam yowowau'no" ("Manzanita hill-on the dawn shows first;" *i. e.*, the dawn begins to show on the manzanita-hill). This song finished, all return to the house, and are given a feast by the girl's parents. The same proceedings are carried out on the next night again; and so on for perhaps a week. The ceremony is known as dō′ngkato or yö′pökato. The girl is known throughout the ceremony as dō′mi. Except during the singing at night, she has to remain in a small separate hut called the dō′mim ūyi.

She may eat no meat or fish for five days. She may not feed herself, but has to have her mother, or other older woman, feed her. She has a basket, plate, and cup for her own use. She must use a scratching-stick for scratching her head. At the end of five days she takes a warm bath in the dō′mim ūyi, and, while still having to remain in the hut, and use the scratching-stick, she may now feed herself. After five days more she goes to the river and bathes, after which her parents give a big feast. At this feast any person may ask the parents for anything that pleases the guest's fancy, and the parents are obliged to give it. This even goes so far as having to give a daughter in marriage if she is asked for. At the feast the girl in whose honor it is given dresses in her best, and much effort is expended in display at this time. At each subsequent menstrual period the woman has to seclude herself for three or four days in the dō′mim ūyi, and must abstain from fish and meat, must not touch or come near a man or boy, and may not handle any food except that which she herself is to eat.

In the foot-hill region the usage is quite different. Here, as soon as the first signs of womanhood are apparent, the girl has five vertical parallel lines made on each cheek. These are alternately red and black, and are painted the first morning after the girl informs her mother of her condition. The lines are about five centimetres long, and one centimetre in width. A ring of pine-needles a metre in diameter is next prepared; and the girl, with another who has already been through the ceremony, stands in the middle of the ring. Both girls then have their heads covered by having skins thrown over them, so that they may not see what goes on. The ring of pine-needles is now set on fire; and when it is burning well, the girls are told to uncover their heads and run out of the ring. They do so, and stop a short distance away. They then return to the place where the ring was, and find there a crowd of other women, who greet them with much laughter, while some of the older ones sing. A circular embankment of earth is then constructed, similar in every way to that made in leaching acorn-meal. It is filled with warm water, and both girls are then washed. All the women and the girls next repair to the girl's house. At nightfall a dance is begun out of doors, in which, however, only women may take part, although men and boys may look on as spectators. This dance is never performed except as a puberty rite. The dance over, the singing is generally kept up by several old women till nearly morning. In the morning one mark is removed from each cheek of the girl, leaving only four on each. During the day, the girl must abstain from eating fish or meat, and is restricted to acorns, seeds, and roots. She may not feed herself, but is fed by her mother or other older woman. She has to remain quietly, as a rule, in the house. On the second night, the dancing is again started; and as before, after it is over, the old women keep up singing till dawn, when another mark is removed from each cheek. This is continued till the fifth morning, when the last marks are removed. Should the menstrual flow still continue, the last mark is not erased till the time of ceasing. The last mark being erased, the girl is now considered ready to marry.

The dance which forms part of this ceremony is known as wū'lū, or wū'lūng ka'mini. No formal invitations to attend the ceremony are sent, nor are "strings" made. The dancers wear no ornaments. A large circle is formed of old and young women, who hold hands. In the centre of the ring are three or four old women, who form a small ring, but who do not hold hands. Each of these old women holds in her hands a string of beads, or a small skin of some kind. This is held in both hands, one hand grasping each end. In the dance, as the dancers pass around the ring singing, the hands of the old women are raised high above the head, first obliquely toward the right, the right hand being uppermost, then obliquely to the left, the left hand being uppermost. While the old women in the inner circle raise and lower their hands thus alternately, the women in the outer ring, who are holding hands, swing these alternately in toward the centre of the ring, then outwards, keeping time in this to the motions of the hands of the women in the centre. In dancing, the general direction of movement is dextral, or with the hands of a watch, although it is said that the opposite direction is sometimes adopted, and that in the same dance they go first one way, and then the other. The songs sung are apparently of considerable variety. When the dance has been continued for some time, a rest is taken; and then the old women who were in the centre change places with some who were formerly in the outer ring.

If the weather is unfavorable at the time when the girl actually reaches puberty, the ceremony is curtailed, and only the singing and marking of cheeks take place. At the first opportunity, particularly when a large party happen to assemble, the dance is held in full.

When the whole ceremony of the entrance into womanhood is over for each girl, she and her parents receive many congratulations from friends and relatives, and the whole affair generally ends in much feasting and merry-making. There is no mention in this region of the general license which seems to prevail, as will be seen shortly, in the area occupied by the Northeastern Maidu.

If a girl was taken as a wife before attaining the age of puberty,—a practice which was apparently not unknown,—then the ceremony here described was never held for her. If the girl reached maturity before she was married, however, then she could not marry until this whole ceremony had been performed.

After this ceremony has taken place, the only other observances are simple. At each recurring period the girl must remain quiet for some days, and abstain from animal food entirely, as well as from all sorts of berries. She does not apparently have to absent herself from the hut, although this is sometimes done. The husband, when she was married, had to observe many precautions at this time as well as she. A specially strong prohibition was placed on the woman seeing blood of any kind during this period.

Among the Northeastern Maidu still different customs were in use, and are kept up to-day to some extent, although in modified form. When the girl finds the first signs of her coming womanhood, she goes off at once, either a short distance from the village into the forest, or to her mother's menstrual hut. The mother at once goes to find the girl, and goes with her immediately into the mountains. The girl must observe all this day, and for the succeeding days of the ceremony, very strict food regulations, comprising complete abstinence from meat and fish, and usually acorns, depending on a few sorts of seeds for food. She must have food-dishes of her own, and her own drinking-vessels, and must use a scratching-stick. Late in the afternoon of the first day, the girl and her mother, who have both gone away from the village into the hills, as above stated, light numerous fires here and there to notify the people in other villages that the ceremony is to be held. The girl carries, during this whole time, a rattle made of a stick from thirty to fifty centimetres in length, with a bunch of deer-hoofs tied to the end of it. She also, besides getting wood for these fires, carries heavy pieces of wood, and places them on logs or bowlders, or in the crotches of trees. The people at the girl's home village, as soon as they see the signal smokes, send out messengers to secure good singers for the dances; and by dark these, with other friends and relatives, have arrived. A fire is then built in the neighborhood of the dance-house, and the first dance is held. In this both men and women take part, all forming a ring about the fire, holding hands. One or two persons are the singers; and these stand with the others in the ring, and hold the yo'kolkö, or deer-hoof rattle, that the girl has had in her hands all day. The girl herself, dressed in her skirt and deer-skin blanket, dances with them. This dance continues for a couple of hours or so, and then, after a rest, is followed by another type of dance. In this the singers sit between the dancers and the fire. The dancers form in a line, facing the east, and holding hands. Then they move backward and forward, keeping the face constantly toward the east. If there is a large number of dancers, they form in two parallel lines. The girl dances, as before, in the line with the others, and both men and women take part. This dance is continued till dawn, at which time the songs increase in liveliness, and the singers throw the deer-hoof rattle to the girl, who, catching it, runs off at top speed, and the dance is over. The girl soon comes back, after getting a small supply of wood, and, going to the menstrual hut, sleeps for a short time. She then spends the rest of the day quietly, perhaps going out once or twice to dig roots, accompanied by two or three old women, who sing constantly. Toward evening the girl goes again for wood, this time for the fire about which the dance is to be held again as soon as it is dark. She must, as far as possible, all day avoid men and boys, but there is no prohibition as to her looking at the sun or sky, as we find among the Achomā'wi and Shasta. All the water she drinks is mixed with a little clay or earth, and must be taken cold, never warm. As soon as it is dark, the dances of the night before are repeated till dawn; and so on for four nights, in all. During these four nights there seems to have been formerly great license permitted, and couples would drop out of the ring or line, and wander away into the brush, to return later and take their places again in the dance. Young and old, married and single, all appear to have joined in the license; and while a woman might refuse to yield herself, it was considered evidence of bad temper, and widely commented on.

After dancing as above for four nights, there follow two days of rest and quiet, and two nights on which nothing takes place. On the morning following the second of these nights of rest, the ceremony of piercing the ears of the girl is gone through. There is little ceremony apparently in connection with the matter, the operation being performed by the girl's mother at dawn, with a sharp cedar awl. The awl is kept carefully afterwards by the girl herself. That night and the next the dances are held again precisely as on the four nights at the beginning, and during these two nights the same general license is permitted. The following morning the girl paints herself elaborately, the whole body being covered with spots of red, black, and white, and the face having several streaks or bands of the same colors. She wears only her woso′m, or bark skirt, and, thus dressed and painted, takes part in the final dance of all, known here, as in the foot-hills, by the term wū′lū. In this dance only women may take part. They form an outer ring, as in the foot-hills, and several old women dance and sing in the centre. The whole is held out of doors; and the girl herself dances in the outer ring, though, according to one account, she sometimes joins the old women in the centre. The singers in this dance do not use or carry the deer-hoof rattle, which now is kept by the girl, but have the clapper-rattle, or wa′tdakö. The dance is continued till nearly noon, when the girl, together with several of the women, goes to the river and bathes and swims, while the old women sing the "swimming-song." The bathing over, the girl, and the women who have been bathing with her, have a foot-race back to the camp, the girl doing her utmost to win. The rest of the day is spent in merry-making and feasting, games and gambling. This closes the ceremony. The entire affair is, however, gone through with again at the next period in exactly the same form as described; and then, after this second performance, the whole ceremony is over. Another informant declared that the order of events was somewhat different; namely, that after the first four nights' dance, and subsequent two nights' rest and two nights of further dance, nothing was done till the next menstrual period, and that it was after this second series of eight nights' ceremonies was over that the final wū′lū was held.

The regulations concerning subsequent periods are about the same as in the rest of the region. The woman has to remain for four or five days in the menstrual hut, and eat only a few roots and seeds. She must prepare her own food; and should she eat with others, they would have heart-disease. She has to use a scratching-stick. Any object or weapon touched by a woman during such times is at once unfit for use, and has to be thoroughly washed and rubbed with certain roots, especially *Angelica* (*Angelica Breweri* Gray [?]), before it can be used again. At the end of the four or five days, the woman has to bathe, and then may go back to her house. The husband, during this time, is also under restrictions, having to live on the same food, and being debarred from hunting.

MARRIAGE.—Marriage customs and regulations varied somewhat in different parts of the region. According to reports, some of these seem to be still in vogue. In the Sacramento Valley section, when a man wanted to marry, he sent a friend with a gift of beads to the family of the girl. The present would be given to the father of the girl, who would keep it if he and his wife and the other relatives considered the gift large enough, and the match a desirable one. If it was not favorably considered, the gift was returned. Sometimes the father gave the beads to his brother, and demanded a second gift of equal value for himself. The consent of the girl was always necessary, and was obtained usually by the suitor before sending the gift to her parents. If accepted, the man usually went to live with the girl's family, if they were members of his own village. If his wife was of another village, however, she invariably came to live with him. For a period of some months, at least, the husband hunted and fished for the family of his wife. Often, if she were from another village, the pair would make a long visit with her family about six months after the marriage.

There seems to have been no very general rule as to whether the man should choose his wife within or without the village On the whole, there would appear to have been a slightly greater practice of local exogamy. Many men were monogamous; but those who could afford it generally had two or more wives, although the chief was the only one, usually, who had as many as four. If a man had more than one wife, there seems to have been no noticeable difference in rank between them, all having equal rights. Should a wife prove unfaithful, her father was obliged to take her back again, and repay the husband the purchase-money or gift made at the time of marriage. The levirate, while not compulsory, was usually complied with. The ordinary customs in regard to the mother-in-law were in force, mother-in-law and son-in-law not looking at or speaking to each other. The woman always covered her head when she met her daughter's husband.

In the foot-hill region the girl seems to have had little or no choice in the matter of a husband. Should a man take a fancy to a girl, he would go to her lodge, sit down beside her father, and talk with him for a short time. In this conversation no mention would be made of the girl or of the man's intentions. These visits would be made frequently, and then, at the end of a week or so, discontinued. The man would then exert himself to hunt and fish, carrying the game secured to the house of the girl's family, and throwing it down, saying, "I give you a deer," or words to that effect. If the gifts were accepted, it was a sign that the man was satisfactory to the parents. If thus accepted, the man would then continue for some time to bring something at each visit, without, however, going into the house. When he had brought the price agreed upon, or what he considered a sufficient amount in case no figure had been set by the girl's parents, he came into the house once more. A bed would then be prepared for the girl at a distance from that of her parents, and the girl would retire early. When the parents went to bed, the man, now regarded as the girl's husband, went to her bed, and took up his place as a member of her family. The pair usually lived thus at the house of the girl's parents till the girl was old enough to manage a house herself, if she had been married very young, or till the husband could provide a house for her.

Men married as many wives as they could afford, and often girls were given as wives when only six or eight years of age. Old men often had four or five wives, ranging from ten to fifty years of age or more. There was generally much discord in the families where there were many wives. Adultery was said to have been common, and the general moral status low.

The Northeastern Maidu have much the same customs. Here as elsewhere, there seems to have been no definite rule as to endogamy or exogamy. In courting, the suitor goes to the house of the girl's parents, taking no gifts with him. He enters, and sits down quietly. When evening comes, if the girl permits him to sleep with her, the matter is settled. If she does not care for him, she sits up all night. The girl is guided much in her conduct by what the family tells her. When a man goes thus directly to the house of the girl's parents, he pays nothing immediately, nor does he make any preliminary gift. If accepted, he at once begins hunting for the parents, and the pair remain thus living with the wife's parents for some months. At the end of this time, the husband takes his wife with him, and goes back to his father's house, where they live afterward, unless the man is able to build a new house for himself. For two or three years, he and his wife go now and then to make visits of a week or two in length with her parents, during which visits the husband hunts for them. A man who is a good hunter often has a wife sent to him. Some one hears of him, regards him as a good husband for one of his daughters, and so sends her to the man. Under such circumstances he must accept her. A man can have as many wives as he can support and obtain. There is no difference in rank between them. If one of two brothers marries one of two or more sisters, the other brother has the first right to marry the remaining sister, or sisters, if the first brother does not. Divorce was apparently an easy matter. It was simply an agreement to separate, the initiative coming from the man, as a rule. Both husband and wife could remarry again at once. The levirate was general. Blood relationship, unless distant, was a bar to marriage. If a wife fails to bear children, she cannot be sent back to her family, as among the tribes to the north. In this region, as well as throughout the whole Maidu area, the present Indians deny that there were ever any *berdaches*, or men-women, among them. They were present in considerable numbers among the Achomā'wi, however, to the north.

Death and Burial. — There is some difference in the customs relating to death and burial in different portions of the Maidu area. In the Sacramento Valley region the usual custom appears to have been burial, and not cremation. The body of the deceased was dressed in the best the family could afford, and decorated with strings of beads, and with feather ornaments of various sorts. It was placed on a bear-skin, and, the knees being bent closely, so that the body was in a squatting position, it was then wrapped and roped up by some of the older men into a ball. Sometimes several skins were used, but, as a rule, one was all that could be afforded. The grave was dug generally close to the village, as, were it at a distance, enemies might dig up the body for the beads. The grave was usually from about a metre to a metre and a half in depth, and over it a mound of earth was heaped. Some food was placed in the grave with the body, as well as bow and arrows, pipe, etc. The body being buried, all went back to the house and wailed for some time; and, although the wailing began at once after death, it was now continued with redoubled energy. In some cases a net was first put over the body before tying it up in the bear or deer skins. Generally the objects put into the grave were broken. The body was placed in the grave in a sitting position, usually facing east. The persons who dug the grave, and roped up the body, are said not to have had to undergo any ceremonial purification. Bodies were burned only when the man died far from home. When cremated, the ashes were taken home and there buried. In mourning, the widow cut her hair short, and covered her head, face, neck, and breast with a mixture of pine-pitch and charcoal obtained from charring the wild-nutmeg or pepper-nut. This pitch she was obliged to wear until it came off, generally many months. Often there was a longer period set, as a year or more, and it was then renewed. The widow must remain in the house continually during the daytime, and was allowed to come out only for a short time after dark. This she must continue until the time of the "burning." There are said to have been no food restrictions. A man in mourning had to cut his hair short, and also wore the pitch. He must not gamble or dance till the "burning" was over. During the period while the widow remained in the house, she was constantly occupied in making baskets and other things which were to be burned for the deceased at the next "burning" that was held. Generally all relatives aided her in this.

In the foot-hill region the body was prepared in the same way; and although cremation was somewhat more in use, perhaps, than in the valley, yet burial appears to have been the prevailing method. The grave was dug with the aid of digging-sticks, the earth being thrown out with the hands or with small baskets. As in this region there were regular burial-grounds, usually near or the same as the "burning" ground, it was not uncommon for bones of previous burials to be found in the course of digging a grave. In case this occurred, the other bones were carefully laid aside, and when the grave was finished, they were thrown in first, and the body placed directly over them. The body was placed in a sitting position, and all the personal property of the person was buried with him. Occasionally, instead of burying all, some of it was burned. The body usually faced the west. Pieces of pine-bark were often put over the body, so that the earth might not rest heavily on it. The house of the man was burned, and often the locality deserted for a while. In the case of a chief, the dance-house was pulled down or burned, and a new one built. The same methods of mourning were in use here. The widow or widower wore a peculiar necklace of string and beads, on which the beads were arranged in different ways. This necklace was worn until the mourner stopped "burning" for the deceased, when the necklace was burned, as described hereafter, in discussing the ceremony of the "burning." Here, as elsewhere, the name of the dead must not be mentioned for at least a year after his death.

In the region occupied by the Northeastern Maidu, the bodies of the dead were decked with beads and feathers, and, if the family owned one, an otter-skin was put about the body. It was then placed in a sitting or squatting position on a bear-skin, other small things, personal property of the deceased, and gifts, added, and the whole roped and securely tied up in a ball. Sometimes the body was put first into a large basket, and the bear-skin placed outside of this. The grave was dug as elsewhere, and the body placed in it lying on the back, with the head toward the east. Food and water were placed in the grave, which was then filled in. If the person were a chief or shaman, then wands (yo'koli), or sticks with pendant feathers (Fig. 59), were set up over the grave. Generally the immediate relatives attended to the preparation of the body, and to getting the grave ready. Most of the man's property was buried with him here, as among the other members of the stock. The persons who attended to the preparation of the body and dug the grave had to undergo a ceremony of purification. The first time any one took part in these duties, he (or she) must fast, abstaining from meat and fish, for five days. During this time he had to use the scratching-stick, live quietly by himself, although not forced to leave his house, and, when the time was over, must bathe and swim. He must eat alone. The next time the period was only four days, the next three, and so on until it was reduced to one. After the death of a chief, the dance-house was usually burned, and rebuilt at a short distance. The houses of other people were generally burned, but not always. For a child it would not be done. Persons were not carried out of the house to die. Most of a man's dogs were killed at his death. In mourning, widows cut their hair and wore pitch, as already described. Men rarely showed any outward signs of mourning unless in case of the death of their father, when the whole family, men and women, cut their hair and

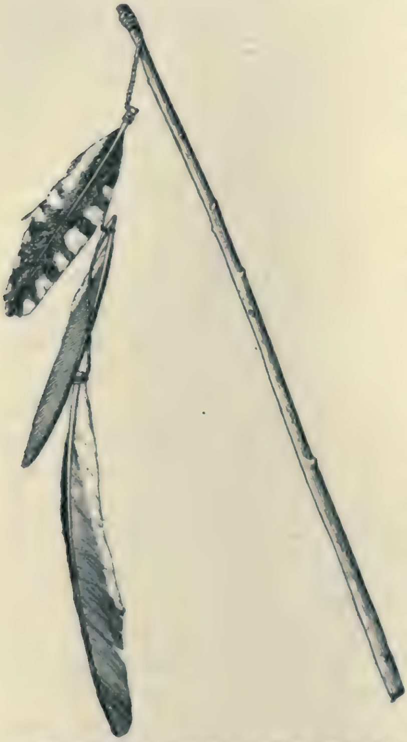


Fig. 59 ($\frac{50}{3238}$ a). Portion of a Wand, or Yo'koli. Total length, 28.5 cm.

put on pitch. A man might do this in the case of the death of his mother, but it was not usual.

When a child of mature years died, if he had been a young man known for his ability, and was much beloved by his father, then the father would cut his hair and put on pitch; but for a young child, or an older one of less reputation, only the mother would do so. Occasionally a man would mourn thus for his wife, but not always. The hair cut off in mourning was, in any case, kept carefully for a time, and then secretly put away somewhere in the brush. It was never made into a belt and worn ceremonially, as was the case among the Achomā′wi and Shasta. Widows wore a necklace of beads of pitch on a buckskin thong. This was worn until the "burning."

When a mother died, leaving a very young child, the child, as a rule, was buried alive with the mother, lying on the mother's breast, as if nursing. If the child were old enough to wean, the grandmother or oldest sister took charge of it, and brought it up. If the body of the mother were burned, the infant was placed similarly on her breast, and burned with her. It is said that, throughout the region, persons who had been invalids for a long time were sometimes buried before death occurred, being roped up and prepared as described.

By far the most important of the ceremonials and customs in connection with death and burial among the Maidu, and one of the most important of all their ceremonials, was the annual so-called "burning," or "ö′stu." The ceremony seems to have varied not a little in the different parts of the Maidu region, being developed to its fullest extent in the valley and foot-hill area, and being less elaborate, and more purely personal in its character, in the higher Sierra. The custom is still kept up to some extent in the mountains and foot-hills, and it is from the latter section that the best descriptions have been obtained.[1]

---

[1] The summer season is the only one which the writer has been able to spend in the field, as a rule. During the single fall and winter that it was possible to be in the field, every endeavor was made to be present at one of the several "burnings" which were held. A complication of circumstances, however, made every attempt unsuccessful; and for much of the account here given of the ceremonial as held in the foot-hill area, the writer is indebted to the very excellent notes taken for him in 1900 by Mr. D. L. Spencer of Mooretown, and more recently (in 1904) by Mr. S. A. Barrett of Ukiah.

In the foot-hill region every village, or small group of villages, has a burning-ground. The selection of a site for this was largely determined by the topography of the region. As a rule, a position on some rising ground clear of brush was chosen, for a watch could then more easily be kept for an attack by some enemy. The time of the burning was formerly a favorite time for such attacks, as the excitement of the participants, and the great noise made, prevented the attacked from being aware of the approach of the enemy. The soil was also a matter to be considered, for, as in general the burning-ground was also the burial-place, soft earth was a necessity.

As a rule, a burning-ground, once chosen, is used for many generations. Sometimes a burning-ground is abandoned for lack of people, the village or villages to whom it belongs having largely died out. As a rule, however, the ground is kept up even when the number of survivors of a village is very small. A man always desired to be buried in the same place as his ancestors. Several villages generally have a burning-ground in common. Should a man move away from home, he would, when he died, be buried in the burning-ground of his native village. If any section should be practically depopulated, the ground would be abandoned; but if an old person should die who belonged there, he or she would be buried there, although no burning would be held for only two or three persons. There are no ceremonies when a new burning-ground is chosen.

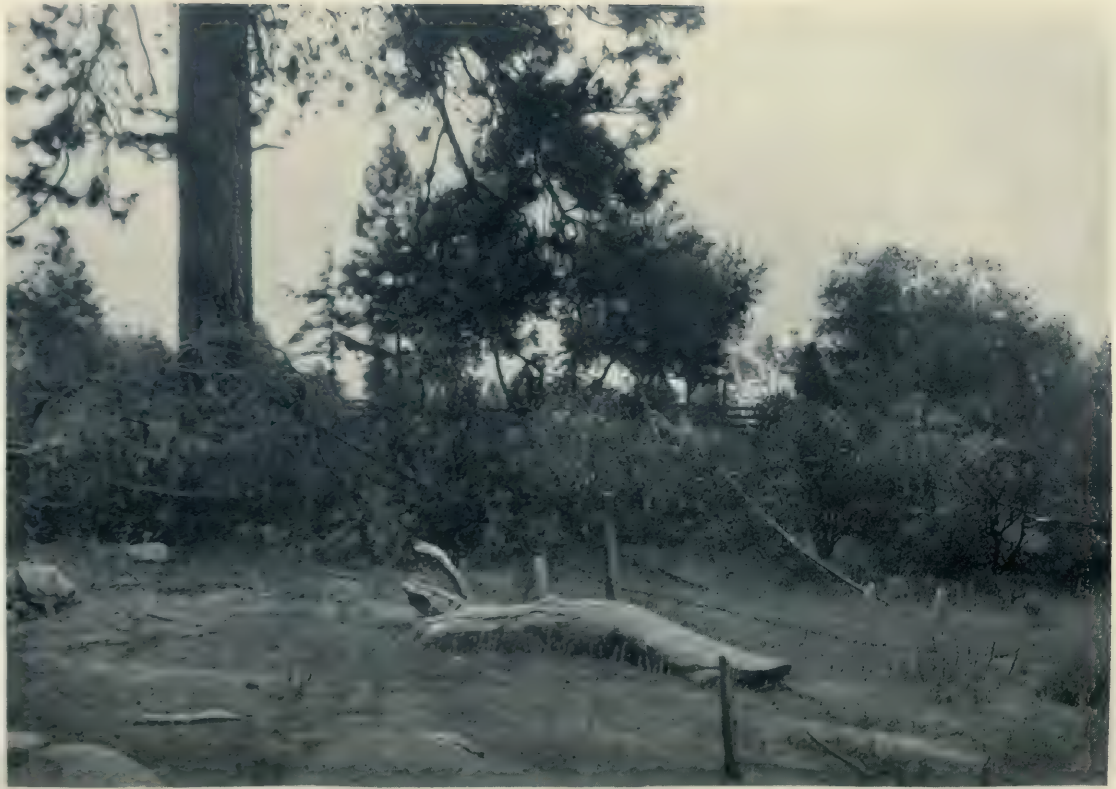
Every burning-ground is ruled by one or more members (generally shamans) of the tribe or village in whose territory it is situated. In case of a death, the family may bury the deceased in the burning-ground of their own village or village group, without asking permission of any one; or the body may be buried, if it is desired, in the ground of some other village; but, under any circumstances, the relatives may not take part in the burning until they have received a membership string or necklace for the ground in which the body was placed. After the body is buried, therefore, the mourners go to those who are in charge of the ground in question, and apply for such a string, so that they may take part in the next burning which is to be held. The owners or overseers of the burning-ground then give the applicant a string, for which payment has to be made in beads, furs, food, or other things. The so-called "strings" are necklaces of beads and cord, the number of beads and their arrangement varying with every burning-ground, so that from the string one can tell at once to what ground the person wearing it belongs. The arrangements of beads on the cord are varied thus:—

o—o—oo—o—o—oo—o—o
oo—o—oo—o—oo—o—oo
ooo—o—ooo—o—ooo—o—ooo, etc.

Having received such a string, the recipient is entitled to burn (or "cry") for a period of five years. At the end of this time, if no other member of the family has died, the person may burn the string, or tell the one from whom it was received that he wishes it to be burned. When this occurs, he receives from the original giver the equivalent of the price paid for it. The strings are worn, while they are in the hands of the mourner, constantly as a necklace. Should other members of the family die before the five years are up, the string may be kept till five years from the date of the most recent death. It seems that strings are also given out under somewhat different conditions. From information obtained by Mr. Barrett, it appears that strings may be issued by the individual mourners, to any persons whom they wish to invite to come to the burning which they expect to hold for their dead. The recipient must give in return a few baskets or something of that sort, and is then entitled to attend all burnings by the issuer, until the latter redeems the string. This is done, as above described, by paying back to the person property equivalent in value to that which he originally gave for it. The string, thus redeemed, is then burned. The whole affair of redemption and burning of the string takes place at one of the regular burnings. In some cases, if the person issuing the strings is wealthy, he or she may give property to the recipient when issuing the string, in which case the recipient must pay this back, when the string is called for to be redeemed. The time of the burning is set by the votes of all who have strings for that particular ground. If a person has many relatives to burn for, the other members will not hasten the matter, but let the person have plenty of time to get things ready. The burning comes, however, as a rule, in the latter part of September, or early October, although it may be put off until somewhat later. Every family may hold one of these strings, but no more. They must be kept with great care, never given away or traded, and never sold.

The date being finally set by the members, as above stated, in consultation with the shaman, knotted strings are distributed to all who are to be present; and, in the usual manner, by untying or cutting off one knot every day, they all arrive together. The village in whose territory the affair is to occur has to supply the guests with food. Each member of the local group gives as much toward this general store as he can. All such food is then collected in baskets in a great pile. The whole number of guests having arrived, the shaman calls for the food to be brought, and then divides it among the people as he sees fit. Usually it is divided with regard to the size of the families, a family of six getting twice as much as one of three. In distributing the food, the chief or shaman calls the name of the oldest male member of that family, who then comes forward, and receives the share for the whole family, which he then divides among them. Any person who comes late, after the food has been distributed, must be looked out for by those who have already received food.

The whole party being assembled, the ceremony begins the evening before the actual burning. This preliminary ceremony is participated in only by the chief mourners. There is little regular order in the affair. About sunset they gather at the burning-ground, and wail and mourn at the graves, crying thus for several hours. Often the graves are covered by the mourners with a thin layer of flour, and then of earth. Members begin and stop when they please, and drop away one by one, going back to the camp to sleep. The purpose of this



Interior of Burning-ground near Mooretown, Butte County, showing Portion of Brush Enclosure and Graves.

preliminary cry is to give notice to the dead that the burning is to take place.

The following morning and early afternoon are spent in repairing the brush fences about the burning-ground, and in gathering the poles to be used for the suspension of gifts. These brush fences or enclosures (Plate XLVI) are usually from twenty to thirty metres in diameter, or less, and are made by piling up brush of any kind about a low, roughly circular earthen embankment about twenty centimetres high. The brush is leaned against poles running between crotched posts, and forms a fence from one to two metres in height. In this fence there are generally two openings left, — one at the eastern and one at the western side, the latter generally the wider. Sometimes but one such opening is made, and then invariably on the western side. In the centre a huge pile of wood is placed for the fire, which is lighted when the ceremony itself begins. The arrangement of the ground is shown in Fig. 60.

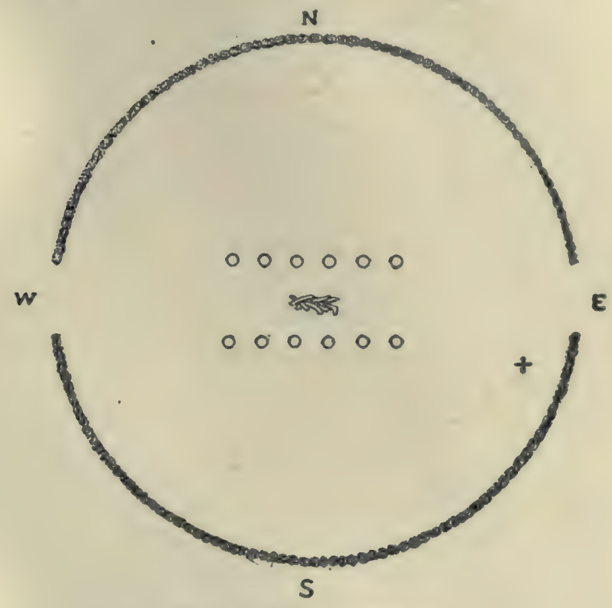
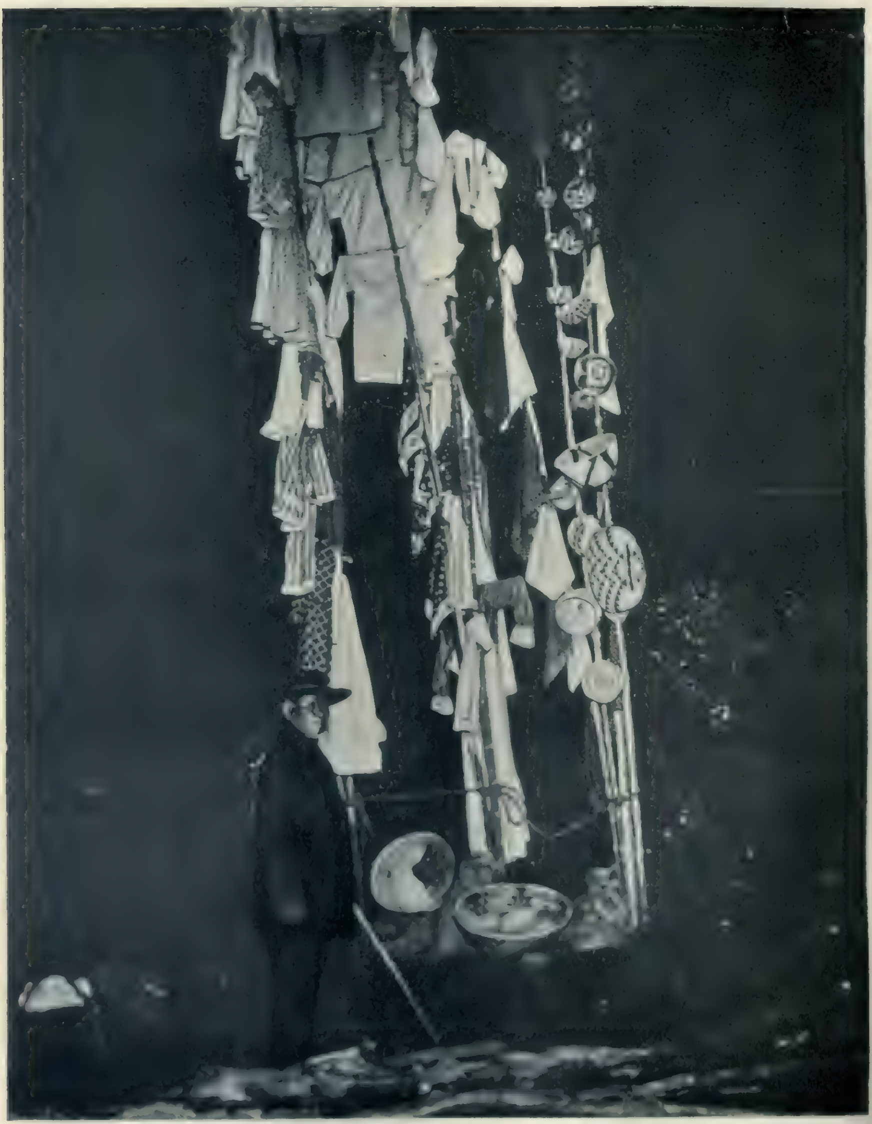


Fig. 60. Plan of Burning-grounds.

The fences having been repaired, and plenty of wood gathered for the fire, all eat their dinner, the local residents partaking of their own supplies of food, the visitors depending on what had been given them, as already described. Each family eats by itself; and, although it may eat with others, it is not customary.

The meal over, the preparation of the poles is begun. Each mourner may have as many poles as he or she wishes and can fill; and each person will be given space according to the amount of property on the poles he has. Some have large quantities to burn, some but little, but the amount of goods does not increase the respect felt for the person. All the property to be burned by each mourner is brought to the burning-ground the day before, but no display is made of it till the evening of the burning itself. If the night is bright, one is supposed to wait till dusk before beginning to prepare the poles and display the property. There is, however, complete individual freedom, and any person may begin to prepare his poles earlier if he desires. Each article which is to be burned in honor and for the use of the dead is, if possible, tied to a pole. Shirts have sticks placed in the arms to hold these out. The shirt is then hung to the pole by a string from the collar. The first shirt is tied at the top of the pole, and others successively below it till the pole is filled to within about one metre of the ground. In a similar manner other articles of clothing for men or women — skins, beads, necklaces, etc., — are tied to other poles. It is customary to have a separate pole for each sort of thing to be burned, all the shirts being on one pole or on several poles, all dresses on others, and so forth. People help each other in the preparation of their poles.

The poles are usually from five to eight metres long, and are either stripped of bark or not, as the person prefers. When these poles are all ready, each family carries its poles, with their loads of goods, to the centre of the burning-ground, and digs a hole about fifty centimetres deep for each group of from five to ten poles to stand in. The poles are then placed in the hole, and earth firmly stamped down about them. The



POLES WITH CLOTHING AND BASKETS ATTACHED. BURNING CEREMONY NEAR MOORETOWN, 1904.

groups of poles are arranged roughly in rows, on the north and south sides of the fire, as shown in the diagram. In 1904 one pole to which baskets were attached was not set in the ground, but thrust into the brush fence, so that the pole leaned inward at an angle of about 45°. The baskets on this pole were not used in the ceremony. The poles being thus set, the heavier articles, and such as could not well be attached to the poles, are piled on the ground at the foot. This would include such things as large baskets, flour, acorns, dried meat, fish, etc. The poles as prepared are shown in Plate XLVII. This all accomplished, each family gathers about its poles, and sits by them till all have finished. The large fire in the centre has not yet been lighted, but many small fires are lighted outside the enclosure for cooking purposes and for light. There is usually one such fire for each family.

After some time, one of the members of the local tribe, holding a member's string for this burning-ground, comes forward and lights the fire. The task is usually given to some old man. So soon as the fire is lighted, any member may, if he chooses, sell or exchange any articles he has brought for the burning; and there is often considerable bargaining among the people for a time. If no trading takes place, or, if trading occurs, when it is over, the chief or shaman makes the opening address. Of this the following, delivered in 1900, may serve as an example: —

"Don't fail to hear me! Don't fail to hear me! Light up the fire, it is not long till daylight. Our people are all ready. We have assembled here to mourn and cry again. We want no trouble. We are here to cry, and not for trouble. Do not drink whiskey. Hear me, all you boys! Do not drink any whiskey and get drunk. Come here, every one, and from every place, and help us cry! If you assist us, we, in our turn, will assist you. I, as your chief, will lead you in all things. Come, one and all! While we are here, if any one has a member-string, and he has finished with it, I am ready to receive it. If no one has one to give up, we will begin."

As soon as this address has been made, the speaker begins crying, and this is the signal for the others to begin also.

The chief or shaman, having begun the crying, throws on the fire a few pine-nuts, acorns, pieces of dried meat or fish. In no case, however, is anything yet taken from any of the poles, or the piles at their bases. All present now join in the wailing. From time to time individuals throw bits of food and small offerings taken from the piles on the ground into the fire, and in this manner the night passes till nearly dawn. The mourners stand back to the fire; and after gently swinging the article to be burned to and fro before the body, it is then swung over the fire and dropped in, the right hand being at the same time thrown up above the head, or simply to the head. In wailing, some moan or wail in a low tone, others scream loudly, and all use different expressions and exclamations, which are addressed to the dead. Some of these are the following: "Pity my poor boy!" "Where are you, my darling girl?" "Why, oh why, did you die, my boy?" "Oh, my husband!" "Come back, my poor sister!" "Brother, brother, brother, no more!" "My child, my child!" "Father, father, father, pity me!" At early dawn the stripping of the poles begins. Any person may start when he wishes, without waiting for the others. The poles are lifted from the holes, and the articles removed, either by the person who is giving them or by any friend who is willing to assist. As the objects are removed, they are thrown into the fire, singly or in armfuls. This is done always by the person who is giving the things. At this stage in the ceremony generally, the member and invitation strings are redeemed. Baskets and other property for this purpose are brought and placed on poles, just as other property is. New strings are also given out at this time. As soon as any one thus starts to take down the poles, it serves as a signal for all to begin, and a general stripping of poles at once takes place. It is at this time that the ceremony reaches its climax of excitement and importance. The older men and women sway their bodies from side to side, and sing and wail, and there is intense excitement among all. The fire is often nearly smothered by the great amount of things thrown into it; and, under these circumstances, a halt must be called till the fire can burn up again. While the things from the poles are being put on the fire, and to a less extent during the earlier wailing, the mourners pat their heads rapidly with the hands, and blow forcibly every now and then, expelling the air from the lungs violently, as if to blow away unseen things. As the dawn approaches, and the last of the goods are being thrown into the fire, the wailing and moaning increase, if possible, in intensity, and the older women try to throw themselves into the fire, having to be restrained by the men. Old men are wiping away the tears that stream down their faces, and many are prostrated by the fatigue and excitement. As soon as all the poles are stripped, the remaining articles piled at the bases of the poles are thrown on; and this continues till all has been destroyed.

After a short interval, during which the assembly secures a little rest, the chief or shaman makes his closing address: "Don't fail to hear me! Our burning is ended. I command you all to go to the dance-house. We are all tired. At the dance-house we have food for all. There we will eat, for it is not well to go home hungry. You may gamble there. The fire is burning in the dance-house, and the house awaits your coming. Gamble and make merry, but let us have no trouble or disturbance. Let us go! I will lead the way." This speech over, the assembly adjourns to the dance-house, and there, after a little food and sleep on the part of the men (the women being usually scattered about in the various other houses), there is for a day or more a constant succession of games, gambling, and feasts. Then one by one the visitors start for home, and the village returns to its former quiet life.

At the burning held at Mooretown in 1900 there were about a hundred and fifty poles filled with objects, so the amount of property sacrificed was not small. There were dresses, shirts, baskets, two poles of ear-rings, one of knitted caps, three bear-hides, one coyote-hide, one pole of raccoon-skins, and one of chinchilla-cat skins, etc. There were about three hundred pounds of flour, birch-seed flour, pine-nuts, dried eels, dried fish, etc. There were also a number of hats for boys, men, and women. The approximate value of the goods burned was about two hundred dollars; the value in baskets destroyed was about equal; and in skins the money-value was about thirty-five dollars. Thus nearly five hundred dollars' worth of property was burned at this single burning. In this same year there were burnings held at four or five other places in Maidu territory; and while the amount of property consumed was probably considerably smaller in all cases, yet the aggregate must have been over a thousand dollars.

The purpose of the whole ceremony is to supply the ghosts of the dead with clothing, property, and food in the other world. Each family gives to its dead what it can afford; and the whole ceremony is distinctly individual, in that there is no general offering for the dead as a body, but each family offers directly to its own relatives only. As already mentioned in speaking of the burial-customs, there is considerable property placed with the body in the grave, and sometimes some is burned at the time of burial. The main reliance is, however, placed on the supplies offered at the annual burning. After sacrificing thus for three or four years, it seems to be felt that enough has been done; and, as a rule, the family does not continue to offer property for a relative at the burnings for more than four or five years. Occasionally, however, some will continue the offerings for a long period; and one case was noted of a woman who had burned for ten or twelve years for her husband, and she had declared that it was her intention to continue to "burn" every year until she should die.

In some cases the ceremony is considerably more elaborate. This is when use is made of an image representing the dead, for whom the offerings are made. The image is made only when the person offered to, if a man, was a member of the Secret Society, or, if a woman, if she were of wealth and importance. The figure (Plate XLVIII) was constructed, in the former case, of a lynx or wild-cat skin stuffed with dry grass or leaves. If no wild-cat or lynx skin could be had, the skin of a gray fox would be used, but never that of a red, black, or silver fox, all of which have white hairs on the tail. The nose of the skin is tucked down inside, a piece of otter or mink skin

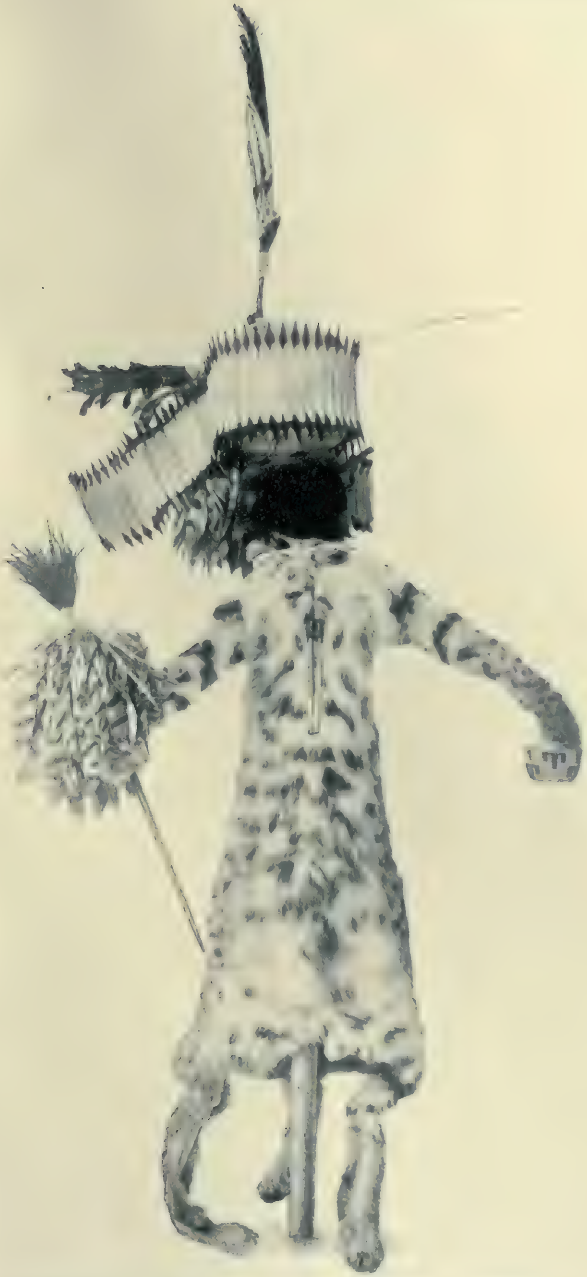


IMAGE FOR A MAN, USED AT THE BURNING CEREMONY.

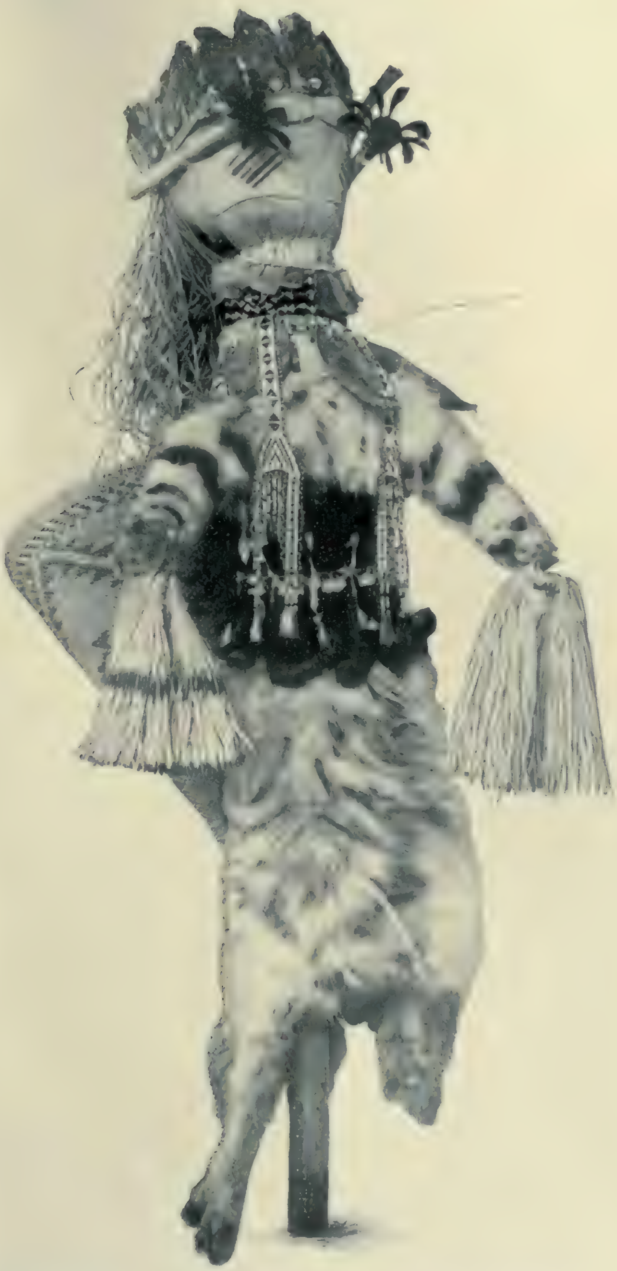


IMAGE FOR A WOMAN, USED AT THE BURNING CEREMONY.

wound around to form the neck, and in place of the head is put a netted cap stuffed with grass. Around this, and over the place where the face would be, is placed one of the regular yellow-hammer feather bands. Sometimes this is made, instead, from the feathers of the speckled woodpecker. The band is affixed only in the central portion, the ends being allowed to stand out from the head on either side. Bunches of hawk-feathers are attached to the "head," also a vertical plume-stick, and a horizontal one as well, these marking the individual's rank in the Secret Society. A bone whistle is hung about the neck. The claws are carefully removed from the fore-paws of the skin, and sticks put into the legs to make them stand out straight like arms. At the end of each arm is suspended a tiny basket containing acorn-meal and birch-seed flour respectively; or a head-plume is, as in the one here shown, substituted for one of the baskets. The hind-legs and tail of the skin are concealed from view. At the lower end of the skin a row of feathers is sometimes tucked in, which may be of any bird except the eagle or a bird with white feathers. These feathers (not used on the specimen figured) form a sort of ruff or skirt. Images made for women differed considerably from that just described. One of these is shown in Plate XLIX. The differences are chiefly that the head is formed of stuffed buckskin in place of the netted cap; that the face is painted with stripes, representing the painting used by girls at their puberty dances; that the quail-plume ear-ornaments are worn, as well as a pair of bone ones; that a woodpecker-scalp head-dress is used in place of a feather band; that a mass of shredded tule or maple-bark is affixed to the back of the head, presumably to represent hair; that a much more elaborate necklace or necklaces are worn; that the feather belt is added; and that two sorts of yo′koli are placed in the hands of the figure, which also carries a small burden-basket on the back. There should be a feather rope running from one hand to the other to make the image complete. In the making of both sorts of images, considerable variety existed, wealthy families lavishing ornament where poor persons had to content themselves with but a few simple beads. The maker of an image must give a "soup" either when he begins work or after the image is finished.

The figure, when completed, is fastened to a stake, which is set up, facing the fire, inside the burning-ground enclosure. The figure is always placed either on the east or west side of the fire, near the opening in the fence (at the spot marked by a cross in the diagram, Fig. 60), and is generally put on the side nearest to the place where lived the person for whom it stands.

The greater part of the ceremony of the burning is the same, whether or not there is an image present. When the image is present, however, during the earlier part of the proceedings it is common for a member of the Secret Society to approach the figure, and act as if feeding it with acorn-bread, saying, "Here is bread! eat it, old man." Then, breaking the bread in pieces, he holds it to the place where the mouth of the image should be. As a rule, there are several baskets of meal and food placed on the ground at the base of the pole which supports the figure. When the end of the burning comes near, the chief or shaman goes up to the image, followed by several members of the Secret Society. One of these takes the figure by the right arm, and another by the left; and thus they lead or carry the image to the fire, making it move as if walking. Should a bow be among the objects to be burned for the figure, one member walks in advance of the image, carrying the bow with arrow on the string, and jumping rapidly from side to side as he walks, aiming now here, now there, stopping frequently, stooping, crouching, hesitating, and trying for a better aim. All his motions are as if he were trying to shoot an unseen enemy. If a bear-hide is to be burned, it is carried before the image by a member of the society, who holds it high above his head, and makes several circuits of the fire thus, crying loudly the while. Behind the image come other members of the society, carrying baskets of acorn-flour, birch-seed flour, acorn-bread, etc. As soon as the procession reaches the fire, the image is thrown on at once, and also the bow, bear-skin, and food. This occurs always as the very final part of the ceremony, just as dawn is breaking, and is the signal for frantic bursts of wailing and crying.

The image is known as ku′kini bü′sdi ("spirit or ghost stays within"), and is regarded as having within it during the ceremony the spirit of the man for whom it was made. It may be made at any time previous to the evening of the burning, and by any member of the Secret Society. If the person who makes the image is not one of the local residents, he must be paid by the family of the person for whom he makes it. The image is regarded as very sacred, and any one offering an insult to it formerly paid the penalty with his life. On one occasion, still within the memory of middle-aged persons, over thirty Indians were killed as a result of some one having broken an image. At the burning held at Mooretown in 1900, a drunken half-breed boy fell against the figure, and he was obliged to give as penalty a big soup-dinner and feast to all present. At a burning where such an image is present, no gambling of any kind is allowed, and no one may clap the hands, under penalty of a heavy fine.

The ceremonial of the burning in the region of the Sacramento Valley was, so far as known, substantially the same as above described from the foot-hill area. The ceremony has at present, however, gone almost completely out of use. The member-strings seem, perhaps, to have been somewhat differently arranged, the necklace being made by a brother of the deceased, and by him placed about the neck of the mourner, usually here a woman. She wears the necklace till the burning, or till a subsequent burning; and then the giver of the necklace cuts it off and burns it himself, paying to the woman beads, which she keeps for herself. A widow may not marry again till the first burning is over. She may do so, however, that very night.

The night after the burning a dance was held in the dance-house. All persons took part in it: there was no special costume, and but one man sat at the drum to beat time. The dancers formed a ring about the fire, and danced four times around, in sinistral circuit. After this dance, the next day a feast and gambling party were held. If the deceased had been a chief, his successor was selected at this time.

In the higher Sierra, among the Northeastern Maidu, the burning is much simpler, and somewhat different. In both the Sacramento Valley and the foot-hills the ceremony is an annual one, and at it all who have lost relatives during the last few years take part together. It is otherwise among the Northeastern Maidu. Here the burning is a ceremony held for a single person alone, and occurs at an interval of a year or two after his death. It is held once, and then repeated the following year, when the matter is over, and no further offerings are made. Others than the immediate family of the deceased of course take part, but offerings are made, it appears, only to the single individual. A burning is not held, moreover, for a child or young person, and often not for an older person, the affair being rather restricted to those who have been notable, and, as the people say, "good Indians." A further point of difference is, that so far as ascertained, no image, or anything resembling it, is ever used. When held, the general ceremony is very similar to that described, the ground being prepared in the same way, the poles arranged, and the property thrown into the fire just before dawn. Similar addresses are also made by the shaman. Among this portion of the Maidu, thus, the burning shows quite a different type; and no ceremony may occur for several years, should there be a prolonged period during which no deaths occur. Among the rest of the stock in the north, however, it occurs regularly each year. It is to be regretted that more detailed information has not yet been secured in regard to the form of the ceremony in the Sacramento Valley region. Owing to the greater degree of civilization of the Indians in that region, however, and their consequent abandonment of the old custom earlier than in the mountains, together with the accompanying dislike to discuss the subject, it has not yet been possible to secure as much information as desired. When such material shall have been obtained, however, it is believed that it will show some points of difference from the form as described in the foot-hills, — differences which, in the light of further study of the Wintun tribes, may lead to conclusions of some interest. The greater simplicity of the whole affair among the Northeastern Maidu connects this form of the ceremony with the ceremonials of the Southern Maidu. Here, again, unfortunately, the material is as yet rather fragmentary; but enough is known to show that there the burning becomes even more simple, keeping the while its character, more or less, of a purely individual offering, and along the southern limit of the stock fading by degrees into the type characteristic of the Moquelumnan peoples. To the north, among the Yana, Achomāwi, and Shasta, the whole ceremony is unknown.

RELIGION.

BELIEFS REGARDING THE SOUL. — The ideas still held by the Maidu in regard to the soul, while substantially similar throughout the area under discussion, may perhaps better be taken up, at least in part, geographically. All human beings, and all animals as well, are supposed to have souls. These are generally spoken of as "hearts;" and often, in speaking of the death of a person, it will be said that "his heart has gone away." This "heart" seems to be regarded as identical with the ghost seen occasionally by shamans and other persons. They are said to be gray in color, and to resemble exactly the person or animal whose life they have been. The ghosts or spirits of the dead often appear to people in dreams, and only shamans see any other kind of supernatural beings. Ghosts are most frequently seen near the burning-grounds at night, or may be heard whistling shrilly in remote and lonely places. To meet one is, among the Northeastern Maidu, a sure sign of death, as the mere sight is enough to kill an ordinary person, if some powerful shaman does not interfere. Shamans themselves even, in this region, feel some fear of ghosts. One must not whistle at night, lest by doing so he call the ghosts. If a ghost is particularly troublesome, it may be "laid" by a powerful shaman. In the foot-hills, ghosts are sometimes seen at the time of the burnings, dancing slowly around the fire while the offerings are being burned. A person's ghost or soul may leave the body in a swoon or in dreams. Sometimes shamans can recall the ghost of a dead person by the help of their guardian spirits.

In the Sacramento Valley region, when a person dies, the soul or ghost stays in or near the body for three or four days. Then it starts off, and travels everywhere that the man or woman has ever been in life, tracing step by step his or her journeyings throughout their whole extent, and in particular visiting every spot on which the person had spat. Besides thus traversing once more the scenes of the earthly life, the ghost is apparently supposed also to act over again every deed performed in the flesh. This done (and it would seem that it is accomplished with miraculous rapidity), the ghost sets out toward the Marysville Buttes, a group of volcanic peaks in the centre of the great expanse of the Sacramento Valley opposite Marysville; and here, entering a mysterious cave which is often spoken of in the myths, finds a supply of spirit-food, of which it partakes, and then passes up to the Hī′piningkôdo ("the above-land"), to the Yō′ngkôdo ("the flower-land"), to the Ku′kinimkôdo ("the spirit-land"), whence it never returns. The ghosts seen by people, by shamans, and, it would seem, perhaps also those who are supposed to be present at the burnings, are the ghosts of persons who have not yet finished the pilgrimage described as preceding their departure. Another slightly different account has it that the ghost, departing toward the Buttes, follows in its procedure that of the first man who died. That first man, dying, carried with him a great load of the offerings made to him at the burning, and sought the Buttes, where, still earlier, the Creator (Kō′domyĕponi) had lived for a time. A being came out to meet the ghost, led him to the cave, and bade him throw down his heavy load of goods. On the south side of the cave, which was a huge dance-house in reality, was water, in which the being washed the ghost; and, being washed, he was led across to the north side, where lay a huge black-bear skin. On this the ghost sat down, and at once "became a person again." Thus it was in the beginning, and thus it is now, with every man who dies. It is said that, besides the trail that leads to the Buttes, there is another, which leads to a bad place, but not much is known about it.

In the foot-hill section there is some variation in the beliefs. The soul leaves the body at death through the mouth, and is "like wind." There seems to be some confused idea in regard to the sun sending down something that causes the person's soul to take flight. As in the Sacramento Valley, the ghost has to retrace every footstep taken in life before it can leave for the other world. During the period of its stay in this world, it frequents or haunts certain well-known places in the vicinity of the different villages. At last it starts on the way to the other world, and sets out toward the east. As it journeys, it comes to water, which has to be crossed. Finally it reaches the other world. Good people travel thither all the way by a well-lighted trail, plainly marked; whereas those who have been wicked travel in the darkness, over a trail so indistinct that they have to crawl on hands and knees painfully all the way, feeling for the road. All, whether good or bad, eventually reach the same place. This is the Hī′pining-koyo ("the valley above," or "Heaven Valley"), a beautiful region where lives Wō′nōmi, the Creator, and where there is an abundance of food, all of which is easy to secure. Wō′nōmi has a tiny basket full of delicious food, from which all who wish may eat; and although a hundred may eat from it, yet it ever remains full. The ghosts of bad people, although they go also to the Heaven Valley, yet go to a less desirable portion, where all is not so charming and comfortable. Another account has it that when a man dies, his ghost follows the sun till it reaches its highest point, when the spirit leaves the sun and continues its way straight upward to the Heaven Valley. Should a man die in the afternoon, then his spirit would follow the sun as it sank to the west, and, continuing with it in all its under-world journey, would rise with it in the morning, and then at noon depart upward to its final resting-place. The Milky Way is often pointed out as the path to this other world. Where the Milky Way forks is the parting of the ways for good and evil. The left-hand trail is the easier, and is travelled by the good. It is also stated that bad people do not go to the Heaven Valley at all, but are changed into rocks and bushes.

The Northeastern Maidu have slightly different beliefs. When a person dies, if he is sorry for his friends and family, and fond of them, he stays ("blows about") for a time, crying constantly. He does not look at people, for this would be fatal to them. Even shamans may be killed if a ghost looks directly at them. After lingering thus as long as he pleases, the ghost leaves. There is, however, no necessity of remaining, and the ghost is at liberty to set out for the other world at once after death. Just before a man dies, the spirits of his father and mother, or some ancestors, come to him; and when the ghost is ready to leave this world for the next, these ghosts of his ancestors serve as his guides. Children cry all the time they are on the way thither, and are met part way by several of their ancestors and relatives. The ghosts, in going to the other world, go off toward the east, for it is there that Kō′domyĕponi, the Creator, lives. Before they can get there, they have to pass through a sort of gate or entrance. At this is a spirit who guards it. If the person is not really dead, but merely in a stupor from which he ought to recover, his time to die not having come as yet, this spirit then turns the ghost back, and refuses to let him through the door. If, however, the man is really dead, and his time has come, the spirit washes the ghost's face, and allows him to pass in. There is an idea that after a long time, the world will, as it is expressed, "turn over," and all the dead will come to life again. This it is thought will happen only when the last Indian dies. The other world to which the dead go is, as in the rest of the Maidu beliefs, a paradise of food and pleasure.

As already mentioned, the house in which a person lived was usually burned at his death, partly to serve as an offering, and partly to prevent the lingering of the ghost. Of other means to keep the ghost away, the only one noted was the sprinkling of salt in a ring around the house, by the people of the Sacramento Valley.

CONCEPTIONS OF THE WORLD. — The general conceptions as to the shape of the world and its character are pretty uniform.

The world is supposed to be an island, nearly circular in shape. It is floating on the surface of a great sea, but anchored by five ropes stretched by the Creator, which hold the island steady, and prevent it from drifting about. Occasionally some being seizes these ropes and shakes them, and this causes earthquakes. The world was flat when first made from the bit of mud brought up from the depths of the primeval sea by the turtle or from the robin's nest floating in the sea. Later the Creator and the Coyote went about over the world, making the rivers and mountains. Coyote was in general responsible for the latter, and for the extreme roughness of the country. As recounted in one form of the creation myth,[1] the world was formed from a bit of mud brought up by the Turtle from the bottom of the sea. The Turtle, with another being, was floating on this sea in a canoe, when a shining being came down from the sky on a rope, entered the canoe, and, from the mud brought up at his request, made the world. At first small, it grew miraculously, till the canoe ran aground near the present town of Durham, near Chico, where the mark of the canoe in the soft mud may still be seen as a huge slough. By this radiant Creator the first people were made, who, after a long period, were transformed, in one way or another, into the various animals we have in the region to-day. By another account the world was formed from a robin's nest found by the Creator floating on the primeval sea. After the world was made, the germs of the present Indian people were prepared by him also; and after ineffectual attempts to overcome the maliciousness of Coyote, the Creator departed from this world, travelling towards the east, into which he disappeared. Various relics of his presence in the world are pointed out, among them the stone canoe in which he and all the other people took refuge, when, in his third and final unsuccessful attempt to destroy Coyote, he caused a great flood to cover all the world. This canoe is still to be seen, it is said, on the summit of Keddie Peak, just north of Indian Valley. The sites of his and Coyote's dance-houses may be seen as huge circular depressions at Durham, and the scenes of many of his adventures are accurately known and pointed out.

---

[1] See Part II of this volume, p. 39.

In speaking of the ropes with which the world was firmly anchored, it will be remembered that five of these were referred to. The sacredness of the number five is much stronger and more apparent in the mountain sections of the Northern Maidu area than in the Sacramento Valley. In the latter region the number is given as four or five almost indifferently, with perhaps a little greater frequency of four. Among the Northeastern Maidu, however, five is the only number, and it is clearly here the only sacred number. This insistence on five is carried even to the cardinal points, and among these Northeastern Maidu there are five points of the compass. These are, in order, west, northwest, north, east, and south.

Thunder is thought to be a man or boy of miraculous abilities. He eats trees chiefly. Had it not been for Mosquito, however, Thunder would have preyed on people. Mosquito deceived him, and refused to let Thunder know whence the blood and meat he brought came. Had Thunder found out that Mosquito obtained these from people, they, and not the trees, would have been his prey. Fire was, as usual among savage people, once in the possession of some one who kept it selfishly to himself. From him it was stolen by strategy, and made the common possession of all. Moon and Sun are brother and sister. Several slightly varying accounts are given of them. In the Sacramento Valley the belief seems to be rather that they were brother and sister of the Creator. In the mountain region this belief does not seem so clear. Sun at first was to travel by night, but she was frightened at the darkness, and so exchanged with her brother, who went at night, while she went by day. They travel over a well-made road, and, when they set, return to the east underground, by way of the south, Moon and Sun travelling by different, although parallel roads. The stars are said to be made of something soft, like buckskin. In the mountain region the Dipper is known as O'koikö ("looking round"). The group known as "Job's Coffin" is called Hĕ'muimū (hĕ'mo, "to roast"?); the Milky Way is La'idamlülüm bō ("morning-star's trail"); the Pleiades are called Do'todoto· (?); falling stars are called Sā'toio ("taking or carrying fire"); the rainbow is thought to be the urine of Coyote.

The Maidu believe that the whole country occupied by them is thronged with mysterious powers or spirits known as ku'kini. These spirits are particularly associated with prominent rocky peaks, crags, or cliffs, with rapids or waterfalls, and with lonely mountain lakes. There are spirits under the earth who are very powerful; there are also many in the sky. These beings are regarded as residing at definite spots, to which in particular the shamans go to gain power. Every shaman must have one or more of these as his guardian spirit or spirits, and they aid him in all that he does. He also, of course, may have the different animal spirits. Those of the rocks and little lakes are, however, very powerful. At times the shaman calls them to the dance-house; and they are supposed to enter by the smoke-hole, and hang head downward therefrom. They are in appearance like people, but always have the tongue lolling; and, as they hang head downward, the tongue reaches to the ground.

There seems to be no very clear belief in any giants or dwarfs. In the foot-hills they speak of curious one-legged beings, who are rather small, and who were found in or about water. They could jump to immense distances, and always induced deep sleep in persons who were able to catch them or get near them. In the mountains there is the Snow Man, apparently something of a giant and cannibal. He cannot be seen, but the creak of his snowshoes is sometimes heard. He is in some way associated with the Yana by the Maidu of Big Meadows and Indian Valley. Mythical or mysterious animals do not seem to be very important in the Maidu beliefs. There is often mention of a gigantic bird, larger than an eagle, that used to prey on people. It is said to have killed them with a blow from its wing. This may refer to the California condor (*Cathartes californianus*).

MISCELLANEOUS BELIEFS. — To stop storms, feathers or wild-pepper wood are burned, or the leaves of various sorts of oaks. — To cause rain or storms, recourse is had to smoking ceremonially, and praying for rain by the shaman. — Rain is also sure to result from the telling of stories about the water-snake, or from chasing frogs. — If one tells stories in the day-time, many believe the narrator will become crooked. — The spots in the moon are thought to be a frog.[1] Others recognize in them the face of the Creator. — If the moon, in its first quarter, stands with the points of the crescent upwards, it denotes a good season for fruit, good weather, freedom from sickness; should it stand with points directed horizontally, it denotes a poor season, bad weather, and sickness.

The first teeth of a child are always put down a gopher-hole. If this were not done, the second teeth would not come quickly.

Yellow-jackets' nests must not be eaten by young people. If this regulation is not followed, the young people will have ear and tooth ache.

The mountain-lion is supposed to catch deer with its tail.

The root of *Angelica Breweri* Gray, if rubbed on the legs, will keep rattlesnakes away. If one chews the root, and spits toward a rattlesnake, or blows toward it, it will be blinded.

Whenever a person is bitten by a rattlesnake, it thunders at once. It does so also when a great man dies, or when a woman has a miscarriage.

Old people, before eating, always say, Maka′d wīsi′lsiltsono ("Spider, shake it away over"). It is also said when an old man is brought water by a child. He shakes a few drops in the child's face while repeating the words.

CHARMS. — Charms of various sorts were used for hunting and gambling. — Stones found inside a deer are the favorite charms for deer-hunters. They were worn about the neck, as were other hunting-charms (Fig. 61). — Shamans had charms of various sorts, which they used to rub gently on the seat of pain, after the sucking-out of the pretended object that was causing the trouble (see Fig. 11, *a*). — Gambling-charms were also much used. Some were similar to that shown in Fig. 11, *b*. — Any strangely shaped or colored stone or object found was picked up, and its powers tested. If, after finding it and carrying it, the man had good luck in anything, the stone or object would then be preserved carefully as a charm for that purpose. — Roots of different sorts were also used as charms.

---

[1] See Part II of this volume, p. 76.

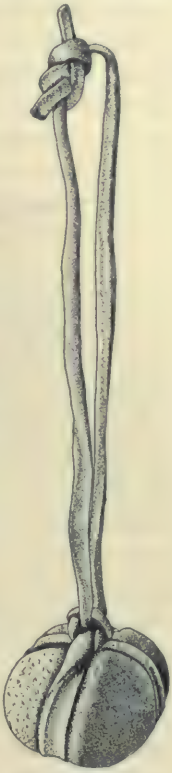


Fig. 61 ($\frac{50}{4015}$). Amulet or Luck Stone. Length, 21 cm.

Shamanism. — The shaman was, and still is, perhaps the most important individual among the Maidu. In the absence of any definite system of government, the word of the shaman has great weight: as a class they are regarded with much awe, and as a rule are obeyed much more than the chief. As the beliefs and customs in connection with the shaman vary considerably, they may best be considered geographically.

In the Sacramento Valley region it is not necessary for a man's ancestors to have been shamans in order for him to become one. Sometimes, while out hunting, he may see something in the woods that makes him fall down unconscious. The being or animal, whichever it is, then talks to him while he is in this trance, and tells him what he is to do. When the man recovers, he spits blood and a whitish secretion of some sort, and then feels perfectly well again. He goes home, but tells no one of his experience, and goes without meat for some days. He never tells any one what he saw till he grows to be an old man. After this first meeting, the same animal or being constantly appears to the man, and gives him advice and help. In other cases a man dives for a fish or for shellfish, but fails to come up. He is thought to have seen something mysterious under the water, and is hunted for, and pulled out. If he revives, he is sure to become a shaman. Soon after the experience he falls sick, and has to be sung over by other shamans. He lies on the north side of the fire, feet toward the blaze. One shaman sits by his side all the time, while others sit about, singing. This is continued all night; and then at dawn two of the men lift the patient, and hold him in their arms, while all present dance. All this time blood is running at intervals from the patient's mouth. There seems to be in this region considerable instruction of the young shamans by the older ones. The older shamans are supposed to have something about as long and as large as a finger, sharp at each end. This they are supposed to insert in the candidate's nose. If he can get it out without help, he will be a shaman; if he has to have assistance, he is a failure. A shaman can by means of these sī′la, as they are called, tell whether a man is a real shaman or not. He simply throws it at him: if it makes him bleed, the man is an impostor.

In doctoring a patient, the shaman has always to fast for a time. He wears a netted cap and a raven-feather stuck into it. The pain or disease is sucked out, and is shown to the patient and friends. It is usually a small object with feathers on it. As soon as this object (the ō′meya) is extracted, it is at once buried. Should the first shaman be unsuccessful, a second is called. Immediately on getting the ō′meya out of the body of the patient, the shaman falls to the ground insensible. He revives after a while, and spits the ō′meya out. Should a shaman fail to cure a patient, he gets no pay, but is not killed as a penalty, as was the case in the region to the north. If a man frequently has bad dreams, he is taken to the dance-house, and the chief has to dance and sing over him. He uses, in this dance, a long-handled cocoon-rattle, called so′lōya. The patient lies on the ground, head away from the fire and toward the east. All the important men and shamans come in; and the chief, in dancing, stands by the main post in the dance-house. When all is over, he washes the man's face, and pours water over his head. Then the man must go and swim and bathe, as also must the chief. Then both may eat meat again, from which they are debarred while the ceremony is going on. For such a ceremony a very large price is asked.

To kill an enemy, a shaman must be highly paid. To accomplish the result, the shaman merely goes to the enemy, and allows his own shadow to fall on the man. Then he goes to the river and bathes, and prays to his spirit guardians, saying, "I want so and so to die;" or the shaman may, as if in fun, merely touch or poke the victim with an elder-stick, which is hollow, and contains some sort of "medicine." This method causes death very quickly. Formerly there was a special rattlesnake shaman in every village, who sucked the poison out, and cured people. These rattlesnake shamans had special ceremonies of their own.

In the foot-hill region the shaman is, in his nature and functions, generally similar to those in the valley. Here, however, there seems to be rather more of a tendency toward the hereditary character of the profession. The person who is to become a shaman first becomes aware of it by dreams, in which the ghosts of the dead, and various spirits or ku′kini, appear to him. The beings seen in the dreams tell the candidates what they are to do, and how they are to sing. For months the novice sings and dances in the dance-house, gradually acquiring the arts of his class, and getting on better and better terms with the spirits who are his guardians and helpers. At the ceremonies in which the shamans sing and dance, the animals who are the guardians of the shaman come to the dance-house, and may be heard by the persons present talking to him in strange voices. They are never seen. Spirits of other sorts also come, some from cliffs or mountains, others from the underground regions. These spirits know everything that is happening even at great distances, and through them the shaman learns of both present and future. In their singing and dancing, the shamans use the cocoon-rattle, and wear various sorts of skin and fur bands, with feathers.

There are female shamans known, but they are not as numerous as the male. A patient who is to be treated by a shaman for pain or disease is, as a rule, left alone in some spot apart from the camp, where the shaman's doings will not be disturbed. The shaman, being told where the patient has been left, goes thither, and, approaching on all-fours, acts, as well as he is able, like a bear or other animal, uttering the while low growls. Slowly approaching the patient, he applies his lips to the seat of pain, and sucks violently. After some minutes, he crawls away, acting as if suffering greatly. Returning to the patient, the sucking is repeated, and again the shaman crawls away. This process is repeated several times, till at last the shaman remains by the side of the patient, making great efforts apparently to extract something from his throat. At last, after prolonged retching and effort, the supposed cause of the pain is successfully gotten out, generally with some force, and either through the nose or the mouth. The shaman, in choosing the object or objects to be extracted apparently from the man's body, as a rule, bears in mind the habits of the patient. If, for example, he is addicted to chewing tobacco, he may extract a piece of tobacco; if the man is known to be over-fond of fish, the object may be a bundle of sharp fish-bones; etc. Such things as broken glass, broken crockery, arrow-points, bugs or worms of various kinds, young mice, deer-bones, fragments of rock, buttons, bits of wood, bear's-teeth, squirrel bones or teeth, grass-hoppers, or bits of iron or nails, — these and many other things are among those apparently removed from the sufferer's body. The worms, insects, etc., are always alive when extracted. The patient is allowed to look at the object, whatever it is; and it is then buried by the shaman. The latter often pricks his nose with a bit of sharp stick or bone, and smears the blood over his face in the course of his performance. If the pain is in the patient's head, recourse is had always to the pipe. The patient is placed in a sitting position; and the shaman, having filled his small, tubular stone pipe, lights it, and then strokes the head of the man gently for some time. Then he blows whiffs of smoke on the forehead of the patient, saying as he does so, in a low voice, "Begone afar off!" "Do not stay!" "To another country!" "Come out!" "Go away, evil pain!" The patient is now allowed a whiff or two from the pipe, and is then supposed to be cured. Most shamans wear a charm suspended from the neck. These charms are very often obsidian knives or spear-points of some size.

There are apparently at least two sorts of shamans, — one the shaman proper (or yō′mi), whose main duties are the cure and causing of disease; and the other the "dreamers" (or nĕ′tdim mai′dü), whose abilities are largely those of being able to communicate with the spirits, and with ghosts of the dead. A man may be a "dreamer" and not be a shaman, but nearly all shamans are also "dreamers." These "dreamers" hold meetings during the winter months, usually every few weeks. The meetings are held in the dance-house, and the affair is always preceded by a feast or "soup." Strings are sent out as for a burning or other ceremonial, and the knots cut off or untied daily, till the date set has arrived. Guests are expected to arrive at the place where the affair is to be held a day or so before the ceremony proper. The day and night before the ceremony are given up to games, gambling, and trading. At dusk on the day set, men, women, and children all gather in the dance-house; and then, after an hour or two of chatting and quiet, the shaman declares himself ready. The smoke-hole is then partly covered, the fire completely banked with ashes, and the interior of the dance-house made perfectly dark. No one is allowed to smoke, to speak, or to leave the house. The ceremony is described as follows: Taking his position at the main post of the dance-house (the one back of the fire), the shaman begins to sing, shaking his cocoon-rattle and beating with it on the post. The lips are given a peculiar quivering motion, making the voice tremble and quaver. After some time spent thus, the spirits are supposed to arrive, and answer the questions the shaman puts to them. The tone of his voice changes, and in an assumed tone he answers his own questions, the answers being supposed to come from the spirits who are present. Besides the shaman, there is always present at these affairs a pehei′pe or "clown." He apes the shaman in everything, repeats after him everything he says, and in every way tries to make the spectators laugh. It is considered a compliment to laugh, and a sign of appreciation. After a while, the shaman grows tired, and stops for a time; and during the intermission the spectators may smoke or leave the place, if they so desire. Later the singing and questioning are resumed, and are kept up till nearly dawn, when the shaman declares the meeting over. At these meetings the ghosts of the dead are often present, and convey their desires to their relatives. They and other spirits give directions as to when feasts are to be held, hunts made, or raids on neighboring villages undertaken. In no case do they attempt to foretell the future. No one but the shaman may interrogate the spirits, or may speak during the ceremonies. On these occasions, and on the day after, so-called "basket-songs" are always sung. They are sung by two men, generally, although not necessarily shamans. The songs are accompanied by beating with sticks on the bottoms of large baskets, turned bottom upward on the ground.

The hū′ūkū, or leaders of the Secret Society, are, as a rule, powerful shamans, and exceed the other shamans in their abilities. They have in their possession charms known as yō′mepa, which cause death to persons if they are touched on the bare skin with these objects. The cure is, as usual, by sucking; and the place sucked is touched and rubbed with the obsidian knife (lō′mim bosō′) afterwards.

Among the shamans of this section there was formerly, it seems, an annual dance, at which each shaman endeavored to overcome the others by means of his "poison" or charms. The dance was held in the dance-house, and shamans from all about were invited to attend. Women shamans were present as well as men. During the ceremony every shaman tried to overcome all the rest; and, although there were spectators present, they were not in danger, as the charms were directed only against the shamans. Each dancer had his or her peculiar dance and motions. Before the beginning of the dance, all fasted for a day or more. The shamans being assembled, the head shaman of the village where the dance was held announced the beginning of the ceremony. Certain rules had to be followed. No person who was not present at the beginning of the dance was allowed to enter it at a later period. No arms, knives, arrow-points, sharp bones, sticks, or mysterious packages were allowed to be brought in, and none could be used as ornaments. Any person touching another was debarred from the remainder of the dance, and any one who should draw any blood from another was killed. The dancers were allowed to wear any sort of feather ornaments they chose. The rules being stated, and all being ready, the shamans from each village gathered together in little groups by themselves. A fire was lighted with the fire-drill, and fed with dry manzanita-wood, which had been carefully inspected by all the shamans to see that no poisonous roots had been mixed with it. The pehei′pe was the leader, and danced naked. No songs were sung, nor was there any beating of time with drum or sticks. Shamans held cocoon-rattles, but that was all in the way of musical instruments that was allowed. In dancing, the body was swayed from side to side, and the hands held against the breast, and then thrown forcibly out and away from the body, palms out, as if warding off evil influences. The throwing-out of the hands was used also to throw "poison" at the other dancers, an object also accomplished by breathing strongly and forcibly. As the dance continued, after an hour or two one shaman after another dropped out of the circle. Some were taken with violent pains in the stomach; others in the back, breast, head, or limbs. Some bled from the nose. Those who first recovered from their attacks, supposed to be the effect of the charms and "poison" sent out by the other shamans, attended to those who succumbed later, sucking out the "poison" or pain that had been thrown at them. Thus the dance continued till only one man was left, and he was declared the chief shaman of all. When the number of shamans was reduced to two or three, who, by their ability to continue so long, were therefore of great power, the fire was allowed to sink very low; and then it is claimed that bluish light, and flames, were seen to surround the shamans who yet held out. At such times these remaining dancers would produce in a mysterious manner lizards, mice, small birds, etc., and, after exhibiting them to the spectators, cause them to disappear.

When the dancing came to an end, all having succumbed but one, all the participants went to a spring near by, and washed themselves carefully. All then returned to the dance-house, and, seated in a circle, smoked the stone pipe and prayed, thus removing all traces of the charms and "poisons" which had been used in the dance. That no evil influence might survive, one shaman was deputed to remove such lingering traces as might be left on the body of the clown. This was done by blowing smoke over his body, as he sat near the centre of the house; and the action was accompanied by exhortations to the "poison" to go away, and leave all free from ill effects. The women shamans taking part, as a rule, failed to endure till the end, although some cases are remembered where a woman has been the last to succumb, and thus shown herself superior to all the rest. The tobacco smoked at the dance was grown and prepared by the resident shaman. At the conculsion of the purification of the pehei'pe, a feast or "soup" was given, and all gambled, and many games were played. This ended the whole ceremony.

In the region occupied by the Northeastern Maidu, the following are the beliefs and customs in regard to shamans and doctors. Here, if either of a man's parents is a shaman, he must inevitably be one also. Even if a shaman have half a dozen children, all must become shamans sooner or later, and would die if they did not. A shaman's children do not become shamans, as a rule, until he himself dies. While the children of shamans must become shamans in their turn, other people, whose parents have not been shamans, may also become such. There were women shamans as well as men; the former being, however, more numerous in Big Meadows, where the Maidu came nearest in contact with the Achomā'wi, among whom women shamans were very numerous. As the methods of becoming a shaman varied somewhat, according to whether the parents of the man were shamans or not, the two cases will be discussed separately.

If either of the parents of a man was a shaman, he is bound, as has been said, to become one a short time after that parent's death. Dreams come to him frequently, and in these he sees numerous spirits of various sorts. This, in a short time, makes him ill; and with his illness the dreams increase, and the spirits come more often and in greater numbers. They talk and sing to him, and they are the cause of his sickness. If he does not answer them, make them presents, and become friendly with them, they will kill him in revenge. These spirits that appear to the man or woman are those dreamed of by the parent or parents, and the same ones stay in the family for generations. As soon as the man's condition is apparent, his friends and family help him to collect food enough for a feast. They also make for him wands of three kinds. These wands (yo′koli), described in more detail in speaking of ceremonial objects, are sticks or wands of willow, as a rule, some of them from a metre to a metre and a half long, from the end of which depend strings of feathers and acorn-shells, or bunches of two or more feathers. Those made for the novice shaman are white, red, and mottled. When made, they are set up on the roof of the house, and also inside, over the spot where the man sits or lies. The man himself places them, as a general thing.

The house being prepared thus, the old fire and ashes are carefully carried out, and the floor swept and covered with fresh earth. A new fire is kindled by means of the fire-drill, and the friends and relatives of the man assemble. When all are seated, one of the shamans present takes half a bead in one hand, and a little tobacco in the other, and talks to the spirits thus: "Be good, be friendly, help us! I will pay you this red wand, this white wand, this mottled wand. I pay you this new fire, this good food. Look down and see us! Look down and see these gifts! These beads come from far away. I will pay you all these things if you will be good." Then he names one by one all the spots in the whole region about, where the spirits are known to live, mentioning every great rock, mountain, lake, water-fall, etc. The long list completed, the half-bead is thrown into the fire, and the tobacco likewise. If the bead crackles, and flies to pieces, it is a good sign; for the spirits accept the gifts, and the man will soon recover. When the bead flies to pieces, all present say, "M-m-m-m-m!" This is supposed to be pleasing to the spirits. All the time the shaman is thus talking, all present must smoke.

The ceremony begins usually about noon; and when it is all over, the family and friends eat, and offer a sacrifice of small amounts of food, which they throw into the fire. When the sun has almost reached the horizon, the next part of the ceremony begins. Again all the spots known to be inhabited by the spirits are named. During all this and the previous ceremony, the man who is to become a shaman lies on the ground, back of the main post of the house. An old shaman sits or stands by the same post, on the north side. All being assembled in the house, as soon as the sun has completely set, the older shaman tells the people to be very quiet, to behave themselves, to make no noise all night. When it grows really dark, several older shamans sit near the novice, and talk to the spirits one after another. They try to appease them, and beg them to be gentle with the man. The spirits which the new shaman inherits are supposed to be present, but angry, and liable to harm him. When a shaman dies, his spirits are angry, and are apt to revenge themselves on the successor until they come to know him. So the older shamans try to pacify the spirits who are to be the guardians of the new shaman; and their own spirits help them in this, holding those of the new shaman, and preventing their hurting him. Sometimes the spirits of the new shaman are very strong, and those of the older men weak; then it sometimes happens, that, if the young man has not done just as the spirits desire, they seize him at this time, take him bodily out of the house through the smoke-hole, and kill him. As the spirits get acquainted with their new charge, they grow fond of him, and cease to attempt to harm him.

After talking long thus, the fire is covered, a cocoon-rattle is put by the foot of the novice and at the base of the main post, and the next stage of the ceremony begins. The novice begins to cry, if indeed he has not been crying and weeping all the time so far. Sometimes he cries so much that he can hardly sing. He is generally very much frightened. He gets up now, however, and, taking the rattle (so'koti), sings the songs that the spirits have revealed to him in his dreams. He pounds the post with the rattle, and the spirits reach down from the smoke-hole, where they are supposed to be gathered, and seize the rattle, making it mount to the very top of the post, even carrying it outside and pounding with it on the roof. When they do this, flashes of light are seen, and strange sounds are heard. The singing is kept up till nearly dawn, when the novice rests and sleeps. He sings in this manner every other night, or every few nights, all winter long. If the spirits which he inherits are weak and few, he need only sing every week or ten days; if they are powerful and many, he may have to sing almost every night, for a time at least. Gradually the spirits are tamed, and become more and more friendly to the man. In the beginning of the period, the novice may not eat meat, and must fast quite rigorously. As time goes on, however, these regulations as to food are relaxed, and after a month or two he may eat what he wills. The longer a man is sick or "crazy," the more powerful will he be as a shaman. If the spirits who are his guardians are very powerful, he may have to have a large number of wands (yo'koli) about him all the time.

A part of the ceremony consists in the piercing of the novice's ears. This is done after the first dance and feast; or it is done in the spring, after the man has spent the whole winter dancing. As soon as his ears are pierced, the man has to go at once to the mountains, and to lakes known to be the residence of spirits, and there perform various ceremonies to be described later. Whatever animal a man dreams of during his first set of dreams when he is just beginning to be a shaman, that animal he may never eat or kill. Should he do so, he would die. "If he kills his dream, he kills himself." In many cases men do not dream of animals: mountains and rocks and lakes are more usual. A shaman may have not only one guardian spirit, but a large number of them. Some shamans have a dozen or more.

If a man wants to be a shaman, and has not had parents or relatives who were such, he takes white and red wands, a fire-drill, a cocoon-rattle, and some beads, and goes up into the mountains alone, to a spot where it is known that a spirit lives. He leaves his house in the afternoon, as the sun gets low, and is dressed always in new, clean clothes. He must run all the way. As soon as the sun goes down, he stops and lights a fire just at the moment when the sun disappears. He goes on again immediately; and when he has nearly arrived at the place where the spirit lives, he lights another fire. Leaving this also, he goes directly to the spot, and at once pierces his ears, using for the purpose the sharpened end of the cocoon-rattle. As soon as the blood runs, the spirit living there sees and knows that some one has come who wants to become a shaman, and he tells the leader of the spirits of that place. As soon as the ears are pierced, the man takes the wands that he has with him and places them on the rock which is always used for the purpose, and on which all who come to this spot place wands. This done, he must go and swim or bathe, if the spot is anywhere near water. If it is not, the man must light a fire and sing. The wands which are placed on the rock "pay" the spirits, and are the equivalent of the wands set up by the novice who inherits his spirits, as described above. In case the spot is near water, the man, after swimming, must dive. He then loses consciousness, and, when he comes to himself, is lying on the shore, having been brought there by the spirits. The cause of his losing his senses is generally something which touches his belly as he is diving or swimming. It is not known what it is. It is always soft and slippery. After coming to himself, he lights a fire, and spends the rest of the night in singing and walking about till nearly dawn. Then he lies down beside the fire and sleeps a little. After a short time the spirits wake the man up, and he is then "crazy," hears the spirits talking together and to him, but cannot see them. At dawn he swims once more, and then, when he comes out, hears the spirits singing or talking at some other place some distance away. He starts at once for that place, and again hears them in another direction. Thus he follows from one place to another for two or three days. All this time he goes entirely without food. At the end of two or three days he goes back to his home, but stops about a hundred metres from the village. A small amount of food is then brought out to him by some of the women of his family or by his wife. This food is always some sort of seeds or acorn-soup, never meat or fish. He takes the food and eats it, and spends the night at a little distance from the village. Next day he comes back to his house, and begins to dream. The spirits have known when he came, from the blood and from the smell of his fires, on which he puts aromatic roots, particularly the wild angelica. He also puts beads into the fires as offerings. They, knowing his desire to become a shaman, follow him back to the village, and then begin to appear to him in dreams, precisely as in the case of the man who has inherited spirits, as already described. The procedure from then on is exactly the same as in the case of the hereditary shamans, and the same ceremonies have to be gone through. Any one who goes out thus may get spirits, and become a shaman: none ever fail. In the case of the hereditary shamans, when the spring comes, after their long winter of singing and dancing, they go off to the mountains, as just described, and by so doing acquire more spirits, and perhaps more powerful ones, than they had inherited. Not till a year or two after the first beginnings of the ceremony does the man try to cure patients. Then he gradually takes up all the duties and prerogatives of his class.

The ornaments and rattles, etc., belonging to a shaman, are handed down to his children. If his children are old enough, he tells them before he dies where he has hidden them. If the children are too young, he tells their mother; and she keeps the secret till they are older, and have begun to be shamans.

Shamans can walk through fire unharmed. They can cause people to grow sick and die in several ways. There are things called yō′mpa,[1] made of roots, feathers, beads, etc. With these they point at people; and a part of the yō′mpa enters the body of the victim, and travels about inside him till it reaches the heart, when the man dies. In pointing the yō′mpa, the shaman has to sing certain songs. If, when some one has had a yō′mpa pointed at him, he can get another shaman who is powerful enough to extract the object, he will recover. The shaman, in curing the patient, sucks the thing out, and shows it to him and to those who are present. In doing this, the shaman puts some charm into his mouth to aid him. This is often a piece of rock-crystal to which a feather is attached. Such charms are known as yō′nkö. One of the worst ways that a shaman can hurt another person is by means of the si′lam itu′m. The i′tū are the "pains." By throwing one of these at a person, a pain is caused in some spot, and sooner or later the man dies. The shamans throw these at each other sometimes; and if the victim cannot throw the "pains" up, he has to call in a third shaman to suck them out. These "pains" are tiny things, the size of flies, and in the shape of little lizards, frogs, etc. Some are small and thread-like, looking like a white hair. Others are like bits of sharpened bone (or ice ?). The pains are alive. As soon as they are sucked out by a shaman, they die. They speak of the shaman who sent them to attack the victim as "father," and always name him before they die, after being sucked out. When removed, they are either made to disappear by being rubbed between the hands of the officiating shaman, or are taken out and buried under a stone. If the pain is successful in causing the death of the victim, it at once, on the death of the man, flies back to the shaman who sent it. When a shaman sends one of these pains, he tells it to go to so and so, and to kill him in such and such a way. After killing the man, the pain is told to come back to a particular spot, which the shaman marks. The shaman then tells some of his guardian spirits to guard the place; and when the pain returns there, the spirits seize it or surround it, and prevent its escape. The shaman knows at once of the death of his enemy, and goes to the place to which he has told the pain to return, lights a fire, talks to the pain and to the spirits who are his guardians, tells the pain to be good and not to try to harm him, and then suddenly seizes it in his hands. He puts it carefully into a bunch of feathers which are worn at dances, known as ba′tsawi, and, thus protected, he hides it securely under some large stone or in a hollow log at a considerable distance from the village. When a shaman has one of these pains with him, he must not smell any meat, or fat, or cooking, nor must he eat meat or fat. He must travel entirely alone, and camp alone to the windward of the fire. The pain and also the spirit, both call the shaman "father." These pains are obtained or made by the shamans far up in the mountains, after much fasting, praying, and talking to the spirits. Only the great shamans could find or get them. Smaller shamans, who had only one or two weak spirits, could not have them, as their spirits were not strong enough.

---

[1] Compare p. 272.

All the great shamans have many spirits, some of whom are animals; and others, again, are such as live in rocks, lakes, etc. The shaman must always do exactly what the spirits tell him, otherwise he will be killed by them. When the shamans dance in the dance-house, and sing their songs, or when dancing and singing to cure a patient, the spirit whose song they sing is supposed to come to the smoke-hole, and there make its characteristic noises. A shaman will sometimes sing several songs, and thus call several such spirits. In speaking to the spirits, the shamans use words that are not used in every-day speech. These words are kept very secretly, and it has been possible to secure but a very few.

Many stories are told of the punishment overtaking those who do not believe in what the spirits say, or who do not believe they really come to the dance-house when the shaman sings. Once a half-breed man from the foot-hills, who was visiting in the mountains, resolved to test the matter. He took with him, to a meeting where the shaman was to talk to the spirits, a pitch stick. As usual, the lights were all put out, and the fire covered; and in the dark the fellow heard the spirits talking, and singing, and beating with their rattles on the main post. Very softly he crept toward the post and felt of it. He could feel it tremble, but could not feel anything there. The shaman was lying quietly on the ground, and yet the spirit was singing and beating the rattle violently at the top of the post. Suddenly he reached over to the fire and lighted the pitch stick, which blazed up brightly. Instantly the singing stopped, but he saw nothing. The meeting, of course, at once broke up. The man was much excited to think he had not seen anything, as he had never believed what the shamans said about the spirits. He started to go home to his camp for the night, but had gone only about two hundred steps when he began to waver, then walked around and around in circles, and finally fell over dead. Another tale is to the effect that another man similarly lighted a pitch stick, and saw the spirit in the shape of a man, hanging head downward from the smoke-hole, his tongue being very long and reaching down to the ground. As soon as the stick was lighted, this object fell to the ground and disappeared. The man who had lighted the pitch stick fell over dead in a few minutes without saying a word.

Other stories are told of shamans acquiring for guardian spirits the spirits of animals introduced by the whites. One case is described where the shaman thought that, inasmuch as the whites were evidently so much more powerful than the Indians, their animals must have more cunning spirits than those of the Indians. So he resolved to acquire the spirit of the honey-bee. This he did, and then was able to secure whiskey in unlimited quantities, as the bee could insert its proboscis through the corks of bottles, or through the closed bung-holes of barrels, and suck out the liquor, which it afterward put into other receptacles for the Indians' use. The bee could also enter anywhere, as it could unlock all doors by inserting its proboscis. For a time the shaman was extremely popular, for he was able to substantiate his claims as to the whiskey. His control over the spirit of the bee, however, suddenly was lost. Among the white residents of the region, this was ascribed to their discovery of a loose board in the wall of the saloon, which opening, when found, was firmly nailed up. With the sudden cessation of the supply of whiskey was also connected the blowing-down by a high wind of an old oak-tree, in the hollow stump of which several dozen bottles of liquor were found concealed.

Some shamans dream of thunder, and then become weather-prophets. Others are more like the "dreamers" of the Sacramento Valley and foot-hills, in that their main occupation is to converse with the spirits and find out favorable places for hunts, etc. One famous shaman in Big Meadows is everywhere claimed to have "dreamed" the coming of the first white people many years before they came. He described their dress, manner of doing things, and the place where they would be first seen.

Shamans, in their ceremonies, generally wear few ornaments. Most wear a band of otter or mink skin about the forehead, and carry cocoon-rattles. When the case is serious, they put on instead the yellow-hammer feather band, and use whistles of bird-bones. These latter are generally used when talking to the spirits at a meeting. Some shamans are particularly successful in curing certain diseases. Some are able to cure the bites of bears, others those of snakes, etc. This specialization, and particularly the close connection of dreaming of the bear with curing bear-bites, etc., does not seem so much developed here as just to the north, among the Achomā'wi.

CEREMONIALS AND DANCES. — The ceremonies and dances of the Maidu, other than the burning and the shaman ceremonies, still remain to be discussed. The construction of the various types of dance-ornaments used has already been described. As the dances and ceremonies are most fully developed in the Sacramento Valley, it is there that we find the most elaborate decorations, and the greatest variety of them. A few words as to the manner of wearing the ornaments are here necessary.

The most common form of feather band (see Fig. 25, *b*), and the one which is worn perhaps more widely and frequently than any other, is of a type having a wide distribution in

California. At points about ten centimetres on either side of the centre, a string is attached, and the band tied by this to the head, as shown in Plate XLVIII. The ends are free to flap and wave with every motion of the wearer, and are sometimes further decorated with small squares of quills, to which a few beads are attached. Sometimes the bands are worn fastened simply by one end, and hanging down the back.

The feather belts are less important, apparently, than the other decorations, and are worn either as a belt or bandolier passing over the left shoulder. Frequently they are worn only by women.

The feather bunches (ba′tsawi) are among the most important decorations, and are made of a variety of feathers, the ones most used being those of the snow-goose, barn-owl, crow, and hawk. The details of construction have already been noted. They are worn in various ways. In some dances they are pinned far forward on the forehead, in others they are on the top or back of the head. Only one is worn at a time

The feather plume-sticks, or dī′hyo (see Fig. 19), are generally worn by the more important members of the Secret Society only. These sticks are worn upright in the hair, as a rule, and are insignia of rank in the society.

The "tremblers" (see Figs. 20, 21, 25 *c*) are stuck in the head-dress in pairs usually, one on each side, standing out horizontally. Sometimes they are placed more nearly in front.

Of the feather coronets and crowns (see Figs. 29 *a*, 30) there seem to have been several kinds. Few survive, however. Descriptions were given of a more elaborate type still, said to have been made wholly of woodpecker-scalps, and to have much resembled a helmet or tall hat with a wide brim. They were worn, it is claimed, only by the highest members of the society, and the last one known in the Sacramento Valley region was buried with its owner some eight or ten years ago.

The feather cape (see Plate XL) is either worn over the shoulders or tied under the arms. The cloak (see Plate XLI) is used only in certain dances of great importance, and by one individual alone. It is much longer and larger than the cape. While the latter is only large enough to cover the wearer's back and sides, in many cases but just meeting in front, and does not extend below the thigh, the cloak covers the wearer from the top of his head to the ground, and is made in one piece, with no opening except at the bottom; *i. e.*, it has to be put on over the man's head. The cape, on the other hand, is like an ordinary cape, and is tied by a cord. Moreover, the cloak, or mâ'ki, has at the top a large feather bunch, which covers the place where the net is gathered together at the top and is placed over the wearer's head.

The feather ropes, or pō'kelma (see Fig. 23), were formerly of white feathers exclusively, although at present there are often feathers of other colors mixed with the white. They are used only in a few dances, and also are among the things burned at the "burning." Several other sorts of ornaments and objects worn and used in the dances will be spoken of when the dances in question are described.

Certain general features characteristic of the dances may advantageously be considered before taking up in detail the description of the dances themselves. As a whole, there seem to be two different types,—those dances in which no animal representations occur, and those in which these representations are an integral part of the ceremony. Where animals are represented, particularly in the region of the Northwestern Maidu, the dancers wear either the skin of the animal in whole or in part (as in the Bear, Deer, and Coyote dances), or ornaments which in some way symbolize the animal or bird in question. In none are any masks worn. In these dances, the personators of the animals endeavor to imitate the actions of the animal, and to utter its characteristic cries. The purpose of these animal dances (confined very largely to the Sacramento Valley area) is said to be varied. Some — like the Deer, Duck, and Turtle dances — have for their purpose the increase of the animals in question, that food may be plenty, and seem to have as an important feature a prayer or address in which the animal is besought to multiply and increase. Other dances, such as the Bear dance, are to soothe and pacify the animal, and render it less likely to attack hunters. Other dances still, like the Coyote dance, seem to refer to the Coyote myths at times, and the part the Coyote played in the creation and during the time of the "first people." One of the dances of the Sacramento Valley people, although not an animal dance, seems to have for its purpose the one which was referred to in the first class of animal dances; namely, the increase of the food-supply of the people, acorns here being desired instead of game. We may, I think, reasonably regard the striking of the main post, therefore, by the dancers in the ā'ki dance, as symbolical of the striking of the branches of the oaks in the autumn in the process of gathering acorns.

An interesting feature of both types of dances in the Sacramento Valley region is that of the bringing of a bundle of sticks by one of the participants in the dance, which bundle is presented to the chief or head man, so far as there is any. There are as many sticks in the bundle as there are men in the village; and each of these men subsequently has to make a payment to the chief of a few small skins or some beads. At least in the area occupied by the Northwestern Maidu, the dances seem to be under the direction of a leader or master of ceremonies, who himself takes part at times. The same person seems to fill the place every year, but this is not certain. Another person of importance is the clown. He is both clown and speaker for the chief or leader, mimicking the words and actions of the dancers, and, when the leader or chief wishes to speak, serving as his spokesman. As a clown he is constantly performing knavish tricks, and attempting to induce the spectators to laugh. He has his regular position in the dance-house, at the foot of the front post; whereas the leader stands just back of the main post, near the drum and the men who are beating it. In the creation myth we find the clown mentioned with the Turtle as occupant of the canoe into which the Creator descended, and as playing a minor part in the events of creation.

In all the dances, and among all sections of the Maidu, great importance is attached to the main post of the dance-house. As stated in speaking of the shaman ceremonies, the guardian spirits, when they appear, always sit on the top of this post, or cling to it, and the semi-sacredness which the post has may in part come from this fact. The post before the door is important, but not nearly so much so as the main post. In the dances, at least, of the Northwestern Maidu, the dancers as a rule, when not circling the fire, are formed into two lines, — one on the north and one on the south side of the fire, — on the left and right hand sides respectively of the door. When this is not the case, the dance is first held on the one side, and then repeated on the other side, of the fire. The rattles used in the dances in this same area, and in general throughout the whole Maidu territory, are always the split-rattle or clapper variety. They are carried by the dancers, and struck on the palm of the hand.

Throughout the whole series of dances, particularly among the Sacramento Valley people, four is very clearly the sacred number, and most individual features of the dances are repeated four times. The ceremonial circuit is also plainly sinistral or contra-clockwise. The introduction of comic interludes (apart from the antics of the clown) is a feature of considerable interest among the Northwestern Maidu, and, from rather uncertain hints, may once have been much more common than the descriptions given me declare.

As stated already, the dances are most numerous and elaborate in the Sacramento Valley region; and it will be best, therefore, to speak first of these. The dance-season being in winter, and the Indians of the valley having to a large extent given up their ceremonies, the writer was unable to witness personally any of the dances here described, and has had to rely on the statements made by a few old men, who remembered the different dances and the approximate order in which they came. The greater part of the information was obtained from the last leader of the dance-ceremonials at Chico, where the celebration of the ceremonials was kept up later than elsewhere. Even there they have not been held in any completeness for many years, owing to the small number of

Indians left who were able to take part, and the strong efforts made by local residents to christianize the people, and induce them to give up all their old ceremonies. A large part of the whole dance series was obtained directly from the Wintun Indians by the Maidu; and at present many of the latter annually repair to Princeton, and other Wintun rancheries on the west side of the Sacramento River, and celebrate the dances with the Wintun.

In the Sacramento Valley region occupied by the Maidu, there seems to have been a regular dance-season, beginning some time in October, and continuing through the winter until April or May. The season began and ended with a dance known as the hĕ′si; and between these came two or three other great dances at stated periods, and a host of lesser dances, each of which might, it seems, be danced more than once, if desired, in the course of the season. The greater dances, however, were held but once a season.

The hĕ′si was in some ways the most important of all the dances. It is still danced by the Wintun, and known to them by the same name, which is said to be their name for it, and to have been adopted by the Maidu with the dance. In it, as in the other greater dances, there seems to be a distinct attempt to represent various spirits and mythological beings. The dance is held in October or early November, the exact date being set by the chief and the leader of the Secret Society. Only men are allowed to be present in the dance-house, although women and children sit outside on the roofs of the houses, and watch what they can. The men of the village being assembled in the dance-house, in the early morning the ceremony begins by the approach of the mâ′ki and his attendant yō′hyōh. The mâ′ki wears the long feather cloak, which is itself called mâ′ki, and has already been described (see Plate XLI). Besides the cloak, he wears stuck in his hair, or rather in the feather bunch which covers and conceals his head, two sticks, to the end of each of which a single eagle-feather is tied firmly. These two sticks are stuck in, one on each side of the head, pointing backward, and resembling, as described by my informant, the horns of a goat. He is followed by a yō′hyōh, who wears similar (?) feather sticks in his hair, is painted black, and, except for a skirt of shredded tule about his waist, is naked. A feather collar of some sort is worn around the neck. Both mâ′ki and yō′hyōh have dressed at some hidden place, and come slowly to the door of the dance-house just at dawn. They enter, and the mâ′ki addresses the men assembled. He has brought with him a bundle of small sticks, one for each man present; and these sticks he gives to the chief. He then removes his feather cloak (it is uncertain whether publicly or behind a mat hung up at the back of the dance-house), and each man present gives to him beads, feathers, or other property, according to his ability. This is all immediately handed over by the mâ′ki to the chief, and it becomes his property. The yō′hyōh then goes out, but returns to the dance-house about the middle of the morning, and dances. He carries a split-stick rattle in each hand. He is accompanied by another being, called mä′si. This person wears a feather band about his forehead, feather plume-sticks in his hair, and a black feather bunch at the back of his head. In his right hand he carries an arrow, and in the left a bow. He wears a breech-cloth only. The yō′hyōh and mä′si dance side by side on the left side of the fire. They dance here twice; *i. e.*, dance and rest, then dance again. This over, they pass around back of the fire, and dance similarly twice on the right or south side. In the afternoon, about two o'clock, a new sort of dancer appears, known as sī′lī. These sī′ling kŭ′kini are six or eight in number, and wear feather bands on the forehead, feather plume-sticks in the hair, and have a long fringe of women's hair tied about the forehead under the feather band, this hair fringe hanging down over the face, and concealing it wholly. They also wear a net (with feathers attached ?) over the shoulders, head, and body, extending to the ground, and belted at the waist with a feather belt. In their left hands they carry bows; and in the right, spears. Their bodies are painted black all over. One after another they file into the dance-house, and dance in line around the fire, contra-clockwise. The leader of the ceremonies puts angelica-root (ta′sū) into the fire at this time. After the root has been put in the fire, the sī′lī cease their circling, and dance slowly on the same spot for some time. After this has gone on a while, they stop, put away their feather ornaments, bows, etc.; and all present sweat, dancing around the fire the while. They dance thus for a time, then rest, then dance again, and again rest, till they have danced four times, when all suddenly rush out of the house and plunge into the river. The following day the yō′hyōh comes in the morning again, accompanied, as before, by the mä′si. This time, however, there seem to be two yō′hyōh. One stops outside, and the other comes into, the dance-house. The sī′lī come again, as before, and dance, and then come the yō′mpui. Of these there are a dozen or more, each dressed and decorated a little differently from his fellows. All, however, are painted red all over, some having white streaks or spots also. They wear the feather band, and also apparently skirts of shredded tule. They come one at a time, and dance similarly to the sī′lī. No angelica-root is, however, put in the fire. When their dance is finished, every one, as before, sweats, and jumps into the river. While all the people have thus gone to the river, the mâ′ki and yō′hyōh come out of the dance-house, and pass in procession around it four times contra-clockwise. This is for the purpose of preparing the dance-house for its occupancy during the winter, and to make it "good." This over, they go to a secret spot, remove their costumes, and go back to get them at night, when they will not be seen.

The next dance following the hĕ′si is said to have been the lū′yi. The following story is told to account for its origin. A man's wife died. One night he saw her ghost outside the village. She spoke to him, told him she was alive, and asked him to go home and attend to the children. He refused: so she wrapped him in her blanket and carried him into the dance-house of the ghosts,—a conical hill some three miles to the south of Oroville. Here the man saw many ghosts, and quantities of skins and objects that had been sacrificed to the dead. The ghosts were dancing; and the man, looking out from his place of concealment, watched them. Soon one of the ghosts said, "I smell a living being." At this moment, fortunately, a bird whose eyes gave the light in the dance-house closed his eyes, so that all was dark for a few moments. In this darkness the man's wife took him out of the house, and again told him to go home and attend to the children. He refused at first, and said he wanted to stay with her, and sleep with all the other ghosts under the water. He tried to do this, but couldn't endure staying under water so long, and was therefore forced to go back home. When he did so, he taught the dance he had seen among the ghosts to the rest of the people. That dance was the lū′yi. To the dance, women are admitted, and they take part also. The men dance naked except for a breech-clout; and the women stand behind them, wearing the usual dress. No feather ornaments are worn. The older people dance first; and all, in dancing, stand in a ring, and dance where they stand, not circling about the fire at all. They dance four times, with rests between, and then cry and weep.

Following this dance comes the lo′li. This is taken part in by women only. They wear the feather band, and feather-and-bead belt, strings of beads about their necks, also the "tremblers" and the form of the feather crown known here as unū′ni (see Fig. 30). They also sometimes wear a feather bunch as well. A dozen or more women take part, and all hold in their hands one of the long feather ropes, or boas, made of white goose-feathers. All hold the same rope, and form a circle apparently. Further details of this dance unfortunately could not be secured.

The next dance in order is the sala′lungkasi. This is danced by the men, who wear the feather cape (si′kli), the "tremblers," the feather crown (unū′ni), and the feather band. Generally about six dance at once. In their right hands they hold a stick or cane; and in the left, a bunch of tules. In the mouth is a whistle. The dancers dress in the dance-house, back of and to the right of the drum. They come out, passing around the fire contra-clockwise to the door. Arrived there, they stop and hold up the canes or sticks, then turn and go back.

There is some uncertainty as to the sequence of dances from here on. The order given, however, is the nearest to the actual which could be ascertained. Apparently following the above comes the Duck dance, known as the wa′imangkasi, or ha′tmangkasi. On the first day of this dance, the mâ′ki and yō′hyōh come as in the hĕ′si. The mâ′ki stays outside, while one of the yō′hyōh comes in, and, without dancing, passes around the fire and out again. The yō′hyōh comes in a second time; and then the mâ′ki comes to the door, and talks to the chief, saying that in coming he ran over logs and fell into holes, and that he brings acorns, fish, and food of all kinds. The people then go out and bring the mâ′ki in, and all cry and wail. As in the hĕ′si, the mâ′ki gives the chief a bunch of sticks, one for each man present, and the men pay as before. The dance then begins, at which women may be present, but in which they do not take part. The leader wears tremblers and a feather plume-stick, and carries a bow and arrow in his hands. One of the dancers wears the peculiar head-dress known as dö. This is constructed as follows. A bunch of shredded tules is placed on the top of the head, the ends of the shreds hanging over the face. Into this mass of shredded tule, as a cushion, are stuck from twenty to fifty long slender twigs, about three-quarters of a metre in length, near the bases of which white feathers are attached. A bundle of these is shown in Fig. 62. These long feathered twigs are stuck in regularly, so that they stand out at right angles to the head in every direction, making a huge head-dress almost two

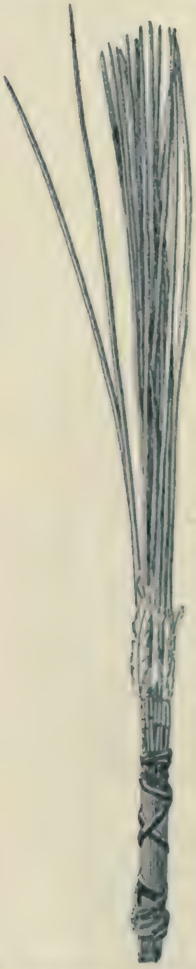


Fig. 62 ([illegible]). Bundle of the Sticks forming the Dö Head-dress. Length, 81 cm metres in diameter, and one which, with every motion of the wearer, trembles and quivers violently. The wearer represents a kŭ′kini, or spirit, and often in the hĕ′si the same person appears. The other dancers in this dance wear tremblers, feather bunches, feather plume-sticks, and feather bands, and are painted black from head to foot. They are completely naked. On the head, as a basis for the feather decorations, they wear, instead of the ordinary netted cap, one made with the addition of white down (Fig. 63). While they dance, they continually shout "Hāt, hāt, hāt!" imitating ducks. The dancers, to the number of a dozen or more, assemble between the main post and drum, and form in line, facing the fire. In front of this line, and thus on either side of the main post, are two other persons known as wū′lū. They wear the feather cape (si′kli), have a bunch of tules in either hand, and hold whistles in their mouths. They are, like the dancers, painted black, and are completely naked. They squat on the ground, and keep time with their feet to the song, and also move their hands in time. The leader, known by the same name (mä′si) as the personage in the hĕ′si, stands back of the post, near the drum, and holds in his hand a cocoon-rattle, with which he keeps time. In dancing, the line of men separates into two parts, one going slowly around to the north side of the fire, the other going around to the south. They then return to their original

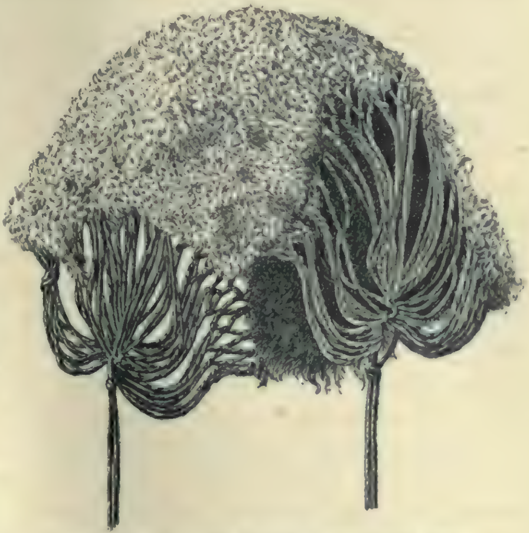


Fig. 63 ($\frac{50}{658}$). Netted Cap with Interwoven Down.

positions. This is done four times; and then the parties reverse, those who went to the north before, now going to the south, and *vice versa*. After the four dances on each side have taken place, the leader suddenly calls out, "Yūh!" and at this signal the two wū'lū dance forward, one on each side of the fire, as far as the post which stands between the fire and the door, then dance backward to their original places. While they do this, the leader dances contra-clockwise completely around the dance-house, and returns to his original place. The line of dancers who first took part, and who have during this time remained quiet, then suddenly rush forward in a body to the door, crying, "Hāt, hāt, hāt!" They then return to their positions, and again dance, as in the beginning, four times to the north, and then change places, as already described. The leader next goes out and brings in the yō'hyōh, who has dressed outside. Both stop by the front post; and the leader then conducts the yō'hyōh once contra-clockwise around the house, leaving him again at the front post, while he himself goes back to his original place at the drum. The yō'hyōh then dances alone, north and south, near the front post, till the leader cries, "Wĕ!" when the latter goes around the north side of the fire, motions to the yō'hyōh, who joins him, and they both dance together on the north side of the fire. Each goes back to his place, and then the performance is repeated. It is then repeated twice on the south side, after which the yō'hyōh removes his dress and ornaments in the dance-house. The dance then goes on as in the beginning, with the line of dancers and the wū'lū, and is kept up till the afternoon, when all sweat. That night the yō'hyōh again comes in and dances, with the repetition of the line and wū'lū dance. The following morning, two men wearing the dö come in, and having also the feather cape and the feather belt, and carrying a bunch of tules in each hand. They are naked also. They dress in the dance-house, and then dance in front of the drum. At first one dances toward the north, while the other dances toward the south, and *vice versa*, thus meeting and passing each other. Following this, they dance, one on each side of the main post, and at a signal go forward to the forward post, and back, repeating this four times. In the evening of this same day, the mâ′ki and yō′hyōh come again, dressing, however, in the dance-house. The yō′hyōh sits by the drum; while the mâ′ki dances four times contra-clockwise around the fire, and then goes out, followed by the yō′hyōh. As soon as he is outside the dance-house, the mâ′ki turns to the left, and goes four times around the house contra-clockwise, and then runs off toward the woods, followed by the yō′hyōh. When they have disappeared, all the spectators put on all their feather ornaments and beads, and collect on the roof of the dance-house, singing, "Nuui yane, nuui yane" (meaning unknown). This ends the ceremony. This dance may be repeated again during the winter, if desired.

The Bear dance (pa′nongkasi) is described as follows. One dancer has a bear-hide, and, going off into the woods, he puts this on, and early in the morning comes to the dance-house, and cries out from a distance. The clown, who generally mimics the actions of the dancers, and attempts to make the spectators laugh in those dances in which he takes part, now answers the call of the bear, and bids him enter the dance-house. The clown wears only a common netted cap, with no ornaments of any sort. The bear then enters, bringing a bundle of sticks, just as the mâ′ki does in those dances in which he appears; and these are, as in the case of the mâ′ki, given to the chief, and all the men present have to pay to him what they can. The payment having been made, the dancer removes his bear-hide, and the women are now allowed to come in. The men now dance, to the number of half a dozen or more. They wear feather bands, and sticks to which a single feather is attached; in the right hand they carry a staff or cane, and in the left a bunch of shredded tule (si′li). In this dance there is no leader (mä′si). The dancers dress in the dressing-space back of the drum, screened off by a few mats, and then pass twice around the interior of the house contra-clockwise, then reversing, and going around twice clockwise. The dance is then taken up by a number of women, who wear a strip of badger-skin around the head, and have feather bunches on their heads at the crown. Each has two bunches of shredded tule, one in each hand, the hands being held close against the breast. The women dance as the men did, twice around in one direction, and then twice in the opposite direction. When they have finished, the men dance again, and then the women again; and so on for some time. Toward midnight the man who personated the bear dresses again, and dances once more, the people all jumping up, and clapping their hands, and crying and shouting. The bear runs around the house once contra-clockwise, and then returns to his dressing-room; comes out again, and repeats. A third time he comes out, and this time rushes up to a log that has been placed on the ground, and seizes it as if it were a man. He then, finding it a log, and not a man, throws it about, and "worries" it. He returns to the dressing-room, and then for the fourth time appears, this time dancing on the south side of the fire, holding his hands with the palms toward him, and vertical. He dances with his back to the fire always. He returns to the dressing-room, and comes out again backwards, and, as before, dances on the south side of the fire. This he does four times, and then the whole is over. The bear is always personated by the same man, who has a helper to aid him in dressing. The person who acts thus as helper has to pay the one taking the part of the bear quite heavily. When the latter dies, his helper succeeds him as the person to act the bear. No one can be a helper who is not a member of the Secret Society.

In midwinter, apparently, comes the Coyote dance (olá'lingkasi). The dance is said to begin like the Duck dance (wa'ima). One man goes off into the woods and dresses in a feather cape (si'kli), for this dance, made rather longer than usual. On his head he wears a coyote's head to which is attached a feather band. Early in the morning this person comes to the dance-house, and, as in the case of the bear, brings a bundle of sticks, which he gives to the chief, and the men present pay as before. He then goes behind the screen, takes off his costume, and eats breakfast, while a helper takes the costume back again to the woods. His breakfast over, the man who took the part of the coyote goes out, and in the woods again dresses up as before. He again comes to the dance-house, and, entering, stops by the front post, and here pretends to catch a gopher, acting exactly like a coyote, — listening with head on one side, and then suddenly jumping and pouncing as if on a gopher. All the people then immediately begin to sing, "Coyote, . . . Coyote, . . . to the Marysville Buttes."[1] ("Hĕ′nom lu′iwitō, hĕnom lu′iwitō, hĕnom lu′iwitō, hĕnom lu′iwitō, ĕ′stōyamannak"). The leader then leads the coyote around the fire clockwise to the north side, where both dance twice. They then go on to the south side, and again dance twice; then they go to the dressing-room and remove their costumes and decorations. Next several women dance. They hold a short bunch of shredded tule in each hand, the hands being held pressed to the abdomen. On their heads they have a downy cap, worn over a peculiar head-dress, which seems to be composed of two cross-sticks about fifteen centimetres in length, to which are fastened a pair of long slender twigs or light sticks, perhaps fifty centimetres in length. These two long sticks have feathers tied at the ends, and the whole affair is securely affixed by a string passing under the chin. The head-dress is known as the kā′we. The women so dressed are divided into two parties, — one standing on the north and one on the south side of the fire. There they dance, standing in line; while the leader, dressed in the same manner, dances back and forth in front of the drum. They all dance four times (*i. e.*, dance and rest, then dance and rest, etc.). Next all go to the front post of the dance-house; and the leader then dances up and takes one woman at a time back to the position before the drum. When all have thus been led back, they take off their decorations. All then go and have their supper, after which the clown, standing on the roof of the house, calls to all to bring food of all kinds for the ka′mini yo′kōn, which terminates the affair. When it is dark, all return to the dance-house, bringing food, which is left outside. The women dance as before; and then the food is brought in, and all have a feast. This ends the dance.

---

[1] This may refer to the myth given in Part II of this volume, p. 45.

Another dance is known as the "Creeper dance" (tsā'myēmpingkasi), named from a small bird which runs spirally up and down around the trunks of pine-trees. In this, only men dance, about a dozen at a time. They wear the feather bunches and feather bands, and have their faces covered with a long fringe of small cords about thirty centimetres long, to the ends of which white goose-feathers are tied. In their mouths they have whistles. They come out from the dressing-room, and go around the fire contra-clockwise, jumping now to one side, now to the other, and moving or waving their hands first to one side and then to the other. They make a single circuit, and then go on around till the leader of the line is at the door, the others being in line behind him, toward the fire. Here they dance for a time, holding their hands with the palms down, and moving them slowly up and down before their bodies, their arms bent sharply. Suddenly the leader calls "Yo'hōhi!" at which they all turn toward the fire, and dance again, now raising and lowering their elbows as if flapping wings. All this time they whistle with the bone whistles in their mouths. Then they go back to the dressing-room, and repeat the whole a second time. When they have gone back the second time, two other men come out, painted black all over, with raven-feathers in their hair, or tied to sticks which are stuck in the hair. About their heads also is wrapped or coiled a feather rope, also of raven-feathers. One of these two men hides; and the other attempts to find him, pretending to be blind. He comes to some one, and seizes him; but is told that he is mistaken, that that is not the one he is looking for. All make much fun of him. Finally he succeeds in finding the other man, and both then go back to the dressing-room. Then the first set of dancers come out again, and do as before, to be followed again by the two; and so on till each has appeared four times. The fire is then covered; and all present, except the dancers, lie flat on the ground in a row or rows on the south side of the dance-house. The leader then comes out, wearing swan-feather sticks in his hair, and holding a rope of white goose-feathers in his hand. He tells one of the men who formed part of the first set of dancers to climb up the main post. This he does; and when he reaches the top, or nearly the top, he clasps the post firmly with his legs, loosens his hold with his hands, and hangs head down, in some way swinging around and around the post, and thus spiralling down to the ground. One after another the men of the first set follow him. When all have done so, the fire is relighted or raked open, and all dance as at first. After once dancing thus, the whole is over. The climbing of the pole, and swinging spirally about it, head downward, are clearly here an imitation of the actions of the bird, apparently the nut-hatch or creeper, for which the dance is named.

About this time of the winter, apparently, the Turtle dance (anō'smangkasi, aktco'lmangkasi), is held. The men wear the regular kā'we described in speaking of the Coyote dance, feather "tremblers" (wa'hyeti), and badger-skin head-band (pā'pi). Their faces are painted black; and they hold in their hands short bunches of shredded tule, which are moved in vertical circles, one hand about the other, as the gambling-bones are in the grass-game. On this account the dance is by some called Gambling dance (hēlā'ngkasi). There are eight dancers thus dressed. When they come out from the dressing-room, four go to the north and four to the south side of the fire, and dance there, facing the fire. Then two leaders (mä'si) come, dressed like the other dancers except for a feather belt worn about the waist. While the other dancers stand four on either side of the fire in a line, the two leaders proceed as follows. The first to come out passes around the main post, going around to the east and then the north side, and so to the south side, where he stops. The second passes directly to the north side, and stops. Then the two dance forward to the door, and, turning, dance back, passing thus between the fire and the line of four dancers on either side of it. They return to the dressing-room, and, after a wait, repeat; and so on for four successive times. Next the four dancers on either side of the fire gather in a group by the door. The two leaders come out, as before; and first the one on the north side of the post dances forward to the door, takes one of the others, and dances back with him to the dressing-room; he then returns for another; and so on till all four have been taken back. He then stands at the north of the post; while the leader on the south side does as he did, and leads his four dancers back. Then both leaders return to the dressing-room. A dance by women follows. They wear the kā'we, the feather belt, and have strings of beads about their necks. They also have bunches of shredded tule similar to those carried by the men. In their hair they often wear, in addition, feather tremblers. The women are brought out one by one from the dressing-room by the leader, who holds his hands, palms together, before his chest, and moves them away from his body and back, keeping the hands vertical. The women clasp the hands on the abdomen or sides, and sway the body from side to side, twisting the body now to the right, and then to the left. In taking the women out, the leader takes the first woman to the north side of the house by the door, the second woman he takes to the south side, and so on alternating till all are brought out. They then stand in two lines,—one on the north and one on the south side of the fire. The leader then takes up his place by the main post, and the women dance where they stand. They dance and then rest, and do this four times. All the women then go to the door again; and the leader, going alternately to the north and south sides, takes the women back to the dressing-room one by one. The next night, apparently, two men dress in the kā'we, feather belt, and also a fox-skin (on the shoulders ?), the tail of which hangs down behind. One of the two has, in addition to the kā'we, a single tall stick standing vertically, and with many feathers tied to it. The two men who dress thus are those who were the leaders the day previously. They come out, singing, "Niye niye hana!" (Niye niye hawi nai ?, "I, I, a fox am I"), the one with the vertical stick being in advance. They turn abruptly to the north, turn again to the south, again to the north, and again to the south. They turn again finally to the north, and go to the north side of the fire. The one in advance goes on around to the south side; while the other, lying flat on the ground, moves his head from side to side, all the time watching the leader, who dances by himself on the south side of the fire. Both are striped with black paint on the face and arms, like raccoons (?). The leader dances facing the fire, twitching the fox-tail from side to side, and moving his hands as if gambling. All the time he dances, he is moving very gradually towards the main post. The other man, who is lying flat on the ground, also moves slowly to the same post. The two slowly get nearer and nearer the post; and then, at a signal from the man who stands by the drum, and beats time for the two men who are beating the drum, the two dancers spring for the post, and seize it, and then in a squatting position dance around and around it, holding it all the time in their hands. They continue to dance about it thus till the time-beater stops them. They then go back to the dressing-room, and all is over.

Another dance held about this time is the alō'lingkasi. Some fifteen or twenty people take part. There are two leaders called otō'si, who wear dö of chicken-hawk feathers, and are painted black all over. They carry long bunches of shredded tule. It is not clear how the other dancers dress. The main body of the dancers comes out, and divides into two parts,—one on the north and one on the south side of the fire,—standing in lines. The leaders then appear; and one on either side of the fire, north and south, dance forward to the door, and back to the main post; all the other dancers then following them, and standing behind them, next the drum. While dancing, all sway their bunches of tule from side to side. The whole is repeated four times, as usual. Then two men and two women come out, both wearing badger-skin bands about the head, beads around the neck, and feather belts. Two white goose-feather ropes hang from the roof, on the south side of the main post. On this same side of the post, the two men and two women sit down, the women nearest the fire, and in a line running north and south. Then each of the two men takes one of the feather ropes and swings it from side to side. At the same time an image representing a baby, placed in a cradle, is held by the man at the south end of the line; and he sways and swings the make-believe infant in its cradle from side to side, as he swings the feather rope. While he does this, he sings. He then passes the cradle, with its imitation-child, to the woman in front of him; and she, after swaying it about, passes it to the other woman, who, in her turn, passes it to the second man. He returns it to the first man, and it is then passed about once more; and so for the usual four times.

Still another dance held in the winter period is the yo′kolangkasi (?). In this only men take part, wearing the feather bands, feather bunches, and buzzard-feather tremblers. They also have a fringe of strings similar to that worn in the Creeper dance, only longer, in this case reaching to the knees. Tule bunches are not used; but the fists are clinched, and held, palms down, above the head. In this dance they stamp with a single foot only. As the dancers come out of the dressing-room, they turn to the left, and go around the fire clockwise, then twice in the opposite direction.

There was another dance known as mo′lokongkasi. The mo′loko was a semi-mythical or fabulous bird of immense size, which, it is said, lived in the water or in the high mountains. It figures prominently in some of the myths, and probably the California condor (*Cathartes californianus*) is meant. This dance has now been wholly forgotten, and it was not possible to secure any further information about it.

The Deer dance (sü′mingkasi) is held, it would seem, generally about March, and is one of the most important of this class of dances. It begins at night, when, all women being out of the dance-house, the fire is covered; and two men, without decoration or ornaments, go around and around the fire in the darkness, while the others present say, "Hoi, hoi!" After thus going around for some time, the spectators say, "Ts, ts, ts!" The two men then stop. After a while they again go around, and again stop; and this is done four times. Next morning very early these same two men go off to the woods; and one dresses in a feather cape, wearing on his head a deer's head with the antlers on. In each hand he carries a stick, painted black and white to represent the fore-legs of the deer, and held thus, the man leaning on them as on two canes. The second man is merely the helper, and aids the deer-man to dress. They come to the dance-house, and, as usual, bring the bundle of sticks, and the usual payment takes place. Then the dance proper begins. Two men wear a head-dress known as bo′topi, consisting of two long sticks, perhaps seventy-five or a hundred centimetres long, projecting forward. A very long feather band is worn, and also a feather crown (?), or perhaps only buzzard-feather sticks. Two other men wear the immense dö head-dress, with its thirty or forty radiating twigs, in this case the twigs being feathered with chicken-hawk feathers. They also have feathers of the tail of the magpie stuck in their hair, and a band of badger-skin about the forehead. The two men wearing the bo′topi come out from the dressing-room first, and, following the leader, first go toward the fire, then turn sharply to the left, make a complete turn, and then, going in front of the drum, pass around the fire contra-clockwise back to the point where the sharp turn was made. The first of the two men stops here; the second goes on, and takes a position on the north side of the drum, symmetrical with that of the first man on the south side. The two men wearing the dö now come out, and, omitting the first turn and circle, pass around the fire as did the others, one stopping on the south and the other on the north side of the drum. Other men then follow, wearing the dö head-dress, but with white goose-feathers instead of those of the chicken-hawk. These take their position behind the pair of men on either side of the drum, and then follow them, as they dance slowly forward to the door and back. The next night the young men go out to the woods and paint their bodies black and white in spots, like fawns. The two men who wore the bo′topi paint themselves in stripes of black and white, as do also the two men wearing the dö. The two bo′topi enter first, followed by the dö; and, last of all, the crowd of young men painted to represent fawns. These latter form in line, half on the north side, half on the south side, of the house. The two bo′topi and two dö then dance back and forth east and west, between the two lines. They dance four times, and then stop. Apparently six or eight men then appear, wearing feather capes and deer-heads. They dance in a squatting position, keeping the back to the fire, and going around contra-clockwise. After four circuits, they stop, and turn their faces to the fire. They then go back to the drum, and lie on the ground; while the leader (mä′si), holding tule bunches in his hands, sings. They then get up and dance again, and again stop and lie down, repeating the whole four times. Then every one cries; and the shaman, taking his cocoon-rattle, sits by the foot of the main post and prays. The prayers are apparently that the deer may be numerous, and that people may get many.

About April, when the leaves are well out, a dance called ā′ki is held. The description of this dance is somewhat confused. The essential parts of it seem to be the following. A man comes out from the dressing-room wearing a single feather-stick. He sings or cries "Yū′hĕ, yū′hĕ, yū′hĕ!" Then he takes a few steps forward, and again stops and sings. Thus he passes gradually toward the front post, going on the north side of the fire. After four stops, he returns to the dressing-room. Then another man comes out, carrying a bow in his left hand, and an arrow in his right. He does as did the first man, and returns to the dressing-room. All the time this is going on, the clown is sitting at the foot of the front post. The dancers, when they reach this post on their fourth stop, talk to the clown, and ask him if he has seen deer. He answers that he has not, but that they may have gone by during the time he was asleep. The man carrying the bow and arrow, when he is told this, says, "I'm going to kill —," naming a man who lives far away. Then he makes motions with the bow and arrow as if shooting the man, and then says, "I've killed him." He then dances back to the dressing-room. Ten or twelve men then dress with tule skirts (Fig. 64), and a fringe of tules covering the whole face. On their heads they have feather bands and feathered plume-sticks. All hold white feather ropes in their hands, holding the hands with the palms up. They come out from the dressing-room, and pass around to the south, to the front post, where the leader stops. At a signal all jump to the north side, and there dance. Then they go back again to the dressing-room. The mâ'ki seems to appear in this dance also, and to follow the dancers above mentioned as they pass to the front post and back. He goes slowly, jumping about, and making feints as if going back to the dressing-room. When the rest have all gone back to the dressing-room, he dances about the fire alone contra-clockwise, holding both hands and arms first to one side, then to the other. Finally he too goes back to the dressing-room. Next two leaders come out. Each carries swan-wings in his hands, has a white-goose or swan feather rope wound around his head, and goose-feather ear-ornaments. They dance with their backs to the fire, in front of the drum, and sprinkle a little acorn-flour at the base of the main post.

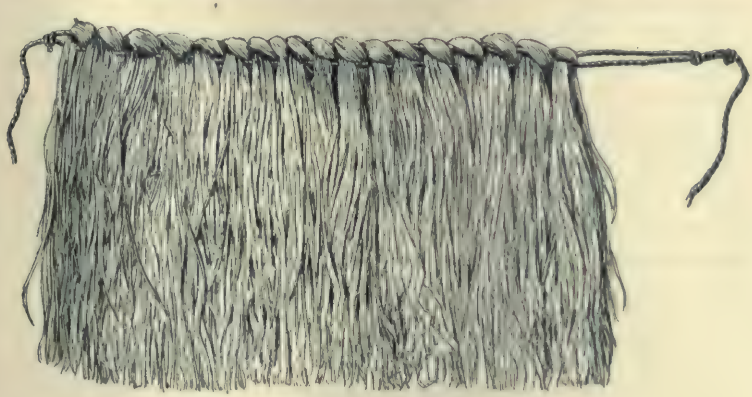


Fig. 64 ($\frac{50}{3088}$). Tule Skirt.

At a signal they turn, and, facing the fire, one goes on the north and the other on the south side. They then return to the dressing-room; and the mâ'ki again comes out, stands on the north side of the fire, and talks. He says he wishes his chief to have plenty of acorn-flour. Then he returns to the dressing-room, and the whole thing is repeated four times. All the spectators then, both men and women, take long poles in their hands, and say to each other, "Let's go fishing!"[1] They are not dressed in any particular way, and wear no ornaments. Each, however, has a whistle. They gather in a ring about the main post, holding the poles in their hands, and then dance. When they stop, they strike the post with the poles. They do this four times (dancing and striking the pole), and then stop. Then several men come out, each with a feather rope, as before, and dance around four times, jumping about and toward the main post as they dance. It is not quite clear whether this ends this dance, or whether the following ceremony is a part of the dance here described. At any rate, the ceremony that follows is closely connected with the dance.

---

[1] I am inclined to doubt the correctness of this phrase.

In this ceremony a being is represented called "Cloud-Spirit" (Yā'ting kŭ'kini). He is painted red all over, wears a form of kā'we in which the two long sticks are replaced by a single stick, covered with feathers, worn vertically, and not projecting horizontally. A fringe of hair is worn over his face, and he carries a bow and arrow. He dresses outside the dance-house in the woods somewhere, and in the latter part of the afternoon comes to the dance-house, and makes a bundle of sticks similar to those brought by the mâ'ki, and by various other dancers already described. This bundle he drops at the door of the dance-house, and then at once runs away. A swift runner is at once despatched after him, bearing the payments from each man, required by the bundle of sticks. When the runner has nearly caught up with Cloud-Spirit, the latter turns, and chases the bearer back to the door of the dance-house. Here he stops, and beckons with his hand slowly, first to the south, then east, then north, and last to the west. He then beckons to the zenith and to the nadir, and, taking the payment which the runner had brought, carries it away, and goes to the river. Here he washes the paint off, and while so doing prays that the runner who brought the payment may die. This is done, because the latter, having been scared by Cloud-Spirit, would pray for his death. If both do this, neither is harmed.

Some time after this, in May, the hĕ'si is held once more, this being the dance with which the dancing-season began. It is held in exactly the same manner as before; and when it is over, the dances stop, and there is a gap or intermission till the following October, when the series begins again with the hĕ′si, as before.

Mention might be made here of the ceremony known as the Yō′ngweda, held every year just after the Sü′mingkasi or Deer dance. At this ceremony the chief, counting up carefully the number of "big men" in the village, makes for each a wand (yo′koli). These wands are from one metre to two metres and a half long; to the end is attached a string, and to the string one or two feathers, either of chicken-hawk or goose. All the men being assembled in the dance-house, the chief takes the wands, and, while all sing, "Mö′sönö lō′haiye," (?) carries them to some bush near at hand, and places them either in the bush, or in a circle on the ground at the base of the bush, planting the sticks so that they stand upright. He then returns to the dance-house, singing. These wands must under no circumstances be disturbed, or even approached by any save the chief or the clown. New ones are made annually, and the old ones allowed to rot. Within the circle formed by the wands, all old and worn-out dance-ornaments are thrown and allowed to moulder away. The ornaments, having been worn in the dances, are sacred, and must be placed in a sacred spot, and thus guarded from profanation. At this ceremony, also, every one of the "big men" gives to the chief a quantity of beads. Of the amount given (which is the same for every man), the chief returns a part, and each man then makes a wi′ssukoli. This is a string about seventy-five centimetres in length, with beads tied along it at intervals of an inch or so. A few white goose-feathers are also attached. The whole is enclosed, then, in a fringe of shredded tule, and to the upper end are attached two feather bunches. The wi′ssukoli, when all completed, are hung to the roof of the dance-house, being attached to the radial rafter on the southeast side, at the point where it rests on the southernmost post on that side. It is at this spot that the "big men" sit during all dances and ceremonies. The wi′ssukoli are allowed to hang there until about July, and must under no circumstances be touched. Then, when the time is up, they are taken down, and placed in the ring of wands, together with all other worn-out or old ceremonial things.

The names of several other dances named for animals, such as the rabbit and rattlesnake, were obtained from various informants; but the older men, and in particular the former leader of the ceremonials at Chico, seemed to be in doubt regarding them.

It is much to be regretted that it has thus far been impossible to witness the performance of any of the dances here described, and thus secure a more reliable account; for the descriptions given, while fairly complete apparently, almost certainly contain errors and misunderstandings. It is even more to be regretted that more satisfactory explanations of the dances, and the symbolism connected with them, could not be obtained. It seemed wise, however, to give the information at hand, rather than to hold it longer in the hope of being able to secure additional material, for it at least gives an idea of the elaborateness of the ceremonial, and of its general type. No attempt, therefore, will be made at present to enter into the detailed explanation of the dances and ceremonies just described. It is hoped, however, that, with the aid of full material from the Wintun, from whom in large part the series of ceremonies are said to have been received, this side of the religious life of the Northwestern Maidu may be made clear.

From the foregoing accounts, it seems that we may, however, draw the following general conclusions. The Maidu of the Sacramento Valley had a definite dance or ceremonial season, lasting from some time in October till the following April or May. During this period there were a large number of different dances and ceremonials celebrated, of which some at least were to be held but once a year, and seem to have come at stated times. The other dances could, it appears, be held more than once in a season, but were not always so held. In the hĕ'si, the dance which opens and closes the dance season, and in many other dances, mythical or supernatural beings seem to be represented, of which the most important are the mâ'ki, the yō'hyōh, and the sī'līṇ kŭ'kini. The mâ'ki is a being sometimes seen in the forest by hunters, who at once fall into a deep sleep, in which they dream. No ill effects are said to follow the encounter. The yō′hyōh are also seen occasionally; but to see them is far more dangerous, for a person almost always dies shortly afterward. What the nature of the sī′līn kŭ′kini is, is not clear. The mâ′ki is apparently always impersonated by the same person at the dances. He has a helper, who assists him in dressing. This helper always succeeds the mâ′ki when the latter dies. At the death of a person who has impersonated the mâ′ki, the helper for the first time puts on the costume of the mâ′ki, and follows the body to the grave. When the grave is dug, the new mâ′ki gets into the grave with the body of the former impersonator, and, while the members of the Secret Society form a circle about the grave to conceal the proceedings from the uninitiated, the feather costume of the deceased is placed upright on a pole in the grave, the new mâ′ki secretly joining the ring of members of the society. When the grave is filled in, it appears to the other spectators as if the mâ′ki had been buried with the dead. The new mâ′ki then proceeds at once to make a new costume for himself. None of these beings have been mentioned in any myths which have thus far been secured. The yō′hyōh are sometimes spoken of as "ghosts," but satisfactory information as to the nature of these three classes of beings has not yet been obtained. The beings are regarded as actually present at the dances, and all details as to the costume and ornaments are kept strictly secret from all but members of the Secret Society.

Connected more or less intimately with these ceremonies are those which are held at the time of building a new dance-house. At such times the whole population of the village aids in the building. All who are able assist in excavating the site for the new house, help to cut or collect the posts which are to stand along the sides of the house, and aid in securing, and putting in place, the slabs of bark or wood which form the walls of the structure. This done, the mass of the people leave; and the remainder of the work is done by the chief, and members of the Secret Society. These go to some distance, and secure the post to be used for the main post of the whole house, — the one at which the leader stands, and on which the shamans and others strike their rattles. This post, like the others, must be of oak. The tree being all cut, and the post prepared, it is dressed with beads and feathers, and painted with ashes and acorn-meal. The post is then carried in procession back to the site of the new house. The line is led by a man wearing a white-feather rope (pō′kelma) as a tail, having on his head feather tremblers of white swan-feathers, and a feather plume-stick which has quail-plumes and woodpecker-scalps on it. In his hand he carries a long cocoon-rattle, which has attached to it feathers of several sorts. Behind this leader comes the post, carried by several men. Behind the post follows a shaman, with rattle, who sings all the time the post is on the way. Arrived at the dance-house site, the procession circles around it four times in contra-clockwise direction, and then takes the post within the excavation prepared. Two men then dress with the white-feather tremblers and the feather plume-stick, and hang many long feather bands all over their bodies, besides wearing large and costly feather belts. In their ears they have bunches of white swan-feathers. The holes for the posts having been dug, and the posts (both the main one and the one nearest the door) having been set up in these holes, one of these two men thus dressed climbs the main post, while the chief and the other men climb the other, and tie the main rafters and beams of the roof securely to the posts. Coming down from the posts, they then undress, and call the other people to come, and all begin to work as rapidly as possible in order to complete the roof, which must be finished before night. The roof completed, that evening the whole village assembles in the new dance-house, and for an hour or more all cry and wail. The clown then lights the fire, — a duty which is always his at all dances. The fire being lighted, the clown then dances. All persons then bring beads and throw them into the new fire as offerings. Outside the dance-house another fire is lighted, on the west side of the house; and here bear-skins, furs, and dressed skins of other sorts, and feathers, are burned. All then dance around the fire in the dance-house, and sweat. This being over, one man dresses with a feather belt, a feather rope about his head, and bunches of swan-feathers in his ears. In his hands he holds a tray-basket. Another man dresses with a long fringe of yellow-hammer feathers over his forehead and face, and seats himself in the centre of the south side of the dance-house, moving his head from side to side as he sits. The first man, holding the tray or plaque basket, has his face painted with acorn-meal, and then stands before the seated man, holding the tray out as if to receive something. He turns to the right, and then to the left, and repeats this four times. This being concluded, all go to sleep. The next night the chief and some of the prominent men of the Secret Society bring in the drum, dressed with feathers just as the main post was, and painted with acorn-meal in white stripes. Like the post, the drum is carried four times around the dance-house, and then is brought in, and placed first just to the north of the door. The chief then stands on the drum. All the prominent members of the Secret Society gather around him, and he then calls out the names of all the different sorts of acorns, and the men repeat these after him. They then all dance. The list of acorns is then called over again, and again the men dance; and so on for four consecutive times. This done, the drum is carried on, around to the north of the fire, to its place behind the main post. Within a few days after this, the hĕ'si dance is held, no matter what the time of year may be.

Information in regard to the dances held by the Maidu of the foot-hills is by no means as full as in regard to those of the valley. So far as has been gathered, many of the dances already described are lacking in the foot-hill region, and those which are held would appear to be more or less changed or abbreviated. There would appear to be more meetings and ceremonies in which the shamans conversed with and obtained information from the spirits, and fewer of the regular dances. So far as known, the apparently regular cycle of dances is absent in the foot-hills. A ceremonial known as yo'koti is held by these Maidu at the time of the dedication of a new dance-house. It is regarded as one of the most important and sacred of their dances or ceremonies.

So soon as, in the opinion of the shaman, it is proper to receive guests in the new house, which seems to be constructed with far less ceremony than in the valley, knotted strings are sent out by runners to all villages friendly to the one where the new house is to be dedicated. As usual, the knots are untied or cut off every day, till the time is indicated for leaving. So soon as the strings are received by a family, the women at once have to refrain from all animal foods, and begin to prepare their acorn-meal and their feather head-dresses for the ceremony. During all the time preceding the ceremony, and between it and the date of sending out the strings, the shaman in charge of the affair holds meetings nightly in the new house, communing with the spirits and singing. To these meetings, only the shaman and members of the Secret Society are admitted. The guests arrive generally a day before the day set for the ceremony. All the women guests bring with them supplies of acorn-meal. In ordinary ceremonials or "soups," each woman or family prepares the flour in a separate filtering-ring, as already described when speaking of the preparation of the flour. In this ceremony, however, all prepare the meal for the soup in one huge ring. Wood and stones are collected, and a suitable spot is selected for the filtering-ring, the requisites being earth that is porous and ground that is level. The meal is sweetened in this large ring in just the same manner as in the smaller ones, all the women working together, and pouring in water from all sides at once.

As soon as the meal has been sweetened and removed from the ring, several wands (yo'koli) are set up in the ring. These wands, a portion of one of which is shown in Fig. 65, are about a metre and a half long, and have pendant from one end three strings to which are attached white feathers and halves of acorn-shells. Generally three or four are placed in one of these large rings. They are placed there by the shaman himself or by some member of the Secret Society. After these wands have been in place for some time, the shaman calls the members of the society, and all stand about the filtering-ring, two or more being armed with poles and fish-lines. With these they pretend to fish in the ring, and, when they pretend to have had a bite, act just as if a large fish had been caught, and are aided in landing the imaginary fish by men who stand behind them. In this way the fishers continue for several hours, some pulling in fish, others deer-meat, acorn-bread, etc., and thus an imaginary pile of food is accumulated. Towards sunset, when the women have finished making the soup from the meal prepared in the ring, the men return to the dance-house, each acting as though carrying a heavy load of food on his back. They stagger along, with bent backs, stopping now and then to rest, and are followed by the women, who act in a similar manner. The imaginary loads being thrown down inside the dance-house, a fire is lighted, and a short rest taken. The shaman then tells every one to prepare for the dance, in which, as a rule, only the older men and women take part.

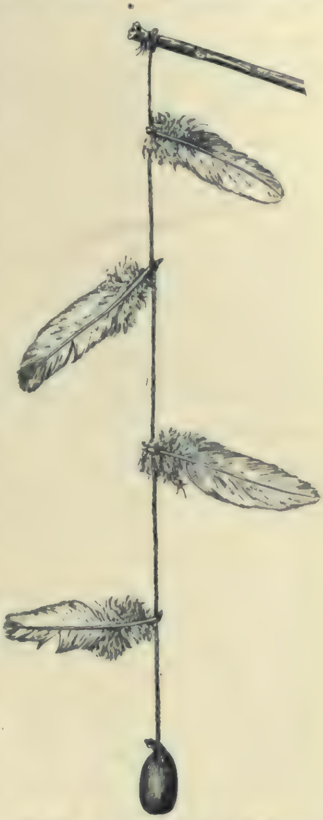


Fig. 65 ($\frac{50}{5258}$). Portion of a Wand, or Yo'koli, with Feathers and Acorn-shells. Length of string, 39.5 cm.

Both women and men wear feather ornaments, the women having yellow-hammer bands, the men having two tremblers stuck into the netted cap, one above each ear. The tremblers are slightly behind the ear, and are placed so as to stand almost vertical. The shaman then gives the signal when all are ready, and the dancers assemble about the main post. All grass and leaves are removed from the floor about the fire, and the dance begins. Two of the men carry clapper-rattles, two have bone whistles, and one takes his place on the drum. The shaman and the men with the rattles remain at the main post; the men with the whistles, together with other men, take part in the dance. In the dances, women take the advance, and the men are generally nearest the fire. The male dancers stand on the south side of the fire, and dance there, stamping and turning, and blowing the whistles. The women start from the main post, and dance slowly around toward the post before the door, keeping always to the north of the fire, and following a curved course. Arrived at the post nearest the door, the women turn, and dance back again to their starting-point, this time keeping to a straight line instead of a curved one. As soon as the women start on their return, the men, gathering near the door-post, dance back toward the main post, following along behind the women, and pursuing a zigzag course, now to the north, and now to the south, of the fire. They keep up an incessant blowing on their whistles the while, and motion with the right hand as if driving the women before them. During the whole time of the dance the spectators have been shouting such phrases as "Not yet!" "Not yet worn out!" Arrived at the main post, all stop for a few minutes, and then, when sufficiently rested, begin again as before. Thus the dancing is continued till all are tired out, and the shaman declares the dance over. When the dance is over, the women all form in a circle about the main post, sitting on the ground. The shaman then proceeds to remove the food prohibitions from them, that have been in force since the time when the first notice of the dance was given. The prohibition is removed by the shaman, beginning at the left-hand side of the circle, and taking the left hand of the first woman in his right hand, and her right hand in his left. He strokes her hands for some time, saying, "Now you may eat deer-meat, and squirrels, and quail, and rabbits, coon, bear, angle-worms, yellow-jackets, robbins, grasshoppers, and all other sorts of flesh foods." He then passes to the next woman and repeats the same actions and words, and thus goes around the whole circle.

This completed, the men and the shaman take branches of pepper-wood, and hold them over the fire for a few minutes, until the strong odor characteristic of the wood is given out. With these branches they then proceed to whip and brush everything in the dance-house, with the intention of cleaning out all evil influences or spirits. This ceremony of purification being completed, the whole ceremony of the yo'koti is over.

The clown, who plays so important a part in most of the ceremonies of both the foot-hill and Sacramento Valley people, is a personage of much interest. He always wears a necklace of "crooked acorns" (see Fig. 37, *b*), and is much respected by all persons. He seems always to be eating; and at the beginning of a dance, when he is called for, he generally appears munching a huge piece of acorn-bread. Very strong arguments are generally necessary on the part of the shaman to induce the clown to stop eating, and take his proper part in the ceremony. The following is given as a typical dialogue between the shaman and the clown.

Shaman. Where have you been, Clown?

Clown. I have been lying down. I am ill, and have pains in my stomach. I found some medicine that never fails, if there be only enough of it (here he takes a bite of the bread, and sits down by the fire).

Shaman. Why don't you put away that bread, and wait till the dance is over before eating?

Clown. Then I can't get any.

Shaman. Who is going to steal your bread?

Clown. I don't know. Perhaps you might.

Shaman. Where did you get your bread?

Clown. I brought it with me. Didn't you see me coming in with a big loaf?

Shaman. I saw you come in with nothing but your cane.

Clown. No, no! I had the bread under my arm. On the other hand, I would not lie about a loaf of bread.

Shaman. Put away that bread, and go out on top of the dance-house. I am going to talk to our people, and you must help me.

Clown. No, it is dark, and I am afraid.

Shaman. What are you afraid of? Are you a woman?

Clown. Yes, I am a woman. Would you like to marry me?

Shaman. Stop your joking and go out at once. I will take care of your bread until you have finished. (Here the clown breaks off a piece of the bread, and, putting it under his arm, gives the rest to the shaman. He then goes out and gets up on the roof of the house.) Are you there, Clown?

Clown. Yes, I am here. Don't eat my bread! Oh! the ants up here are eating me up.

(The shaman here begins his speech to the people.)

Shaman. Don't fail to hear me! Don't fail to hear me! We are going to have a dance in which both women and men must take part.

Clown. Don't fail to hear *me!* Don't fail to hear *me!* You are going to have a dance in which you all must take part.

Shaman. We come here not for trouble.

Clown. I came here not for trouble.

Shaman. But we came to dance and feast.

Clown. But you came to dance. I came to eat and gamble.

Shaman. Bring on the soup.

Clown. Bring on the soup! Bring on the bread! Bring on the fish! Bring on the meat! Ha, ha, ha! Don't fail to hear *me!* Don't fail to hear *me!*

Shaman. Bring on some wood! How can we gamble without wood?

Clown. Bring on wood, all of you! How can I gamble or keep warm?

Shaman. Bring on the soup! Bring on the bread! Bring on the fish! Bring on the meat! We are all hungry.

Clown. Haa-a-a-a-a-a! I am going down! (Here the clown comes down from the roof, and re-enters the dance-house. As he enters, he speaks again.) Bring on the soup! Bring on the bread! Bring on the fish! Don't fail to hear me! Haa-a-a-a-a! Come on, come on! Fill up my old woman's burden-basket! Haa-a-a-a-a!

The clown then goes to the base of the main post, where his pipe is always placed. This pipe (Fig. 66) has a peculiar form, and is larger than other people's. He fills it, if possible, from the shaman's supply of tobacco, and then smokes, puffing out as much smoke as possible. Between the puffs he calls out, "I like acorn-bread! I like deer-meat! I like fish! I like soup! Be good to me, be good to my old woman!"

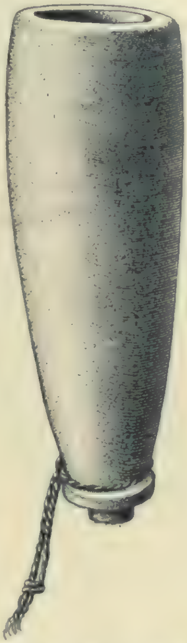


Fig. 66 ($\frac{50}{5252}$). Clown's Pipe, of Steatite. Length, 20 cm.

Here men enter, bringing the food. At once the clown jumps up, puts away his pipe, and shouts, "Haa-a-a-a-a!" He then goes from one basket to another, tasting of each, and endeavors to steal for himself the one that tastes best. He is, however, detected by the shaman, and forced to put the basket back. The shaman reprimands him sharply for his actions, but the clown pays little attention, and continues doing all sorts of knavish tricks. When the dance begins, the clown starts off with great vim; but as soon as the shaman turns his back, the clown's efforts become less vigorous, he dances half-heartedly or on one foot, and often produces a piece of acorn-bread from under his arm, and eats that. As soon, however, as the shaman's attention turns toward him, he at once begins to dance frantically again.

What is known as the "Daylight Speech" is made by the clown during the celebration of many of the different dances and ceremonies. It is delivered from the roof of the dance-house. The following is an example of such a speech.

"Daylight, Daylight, Daylight, don't fail to hear me! Daylight Daylight, Daylight, bring on the soup! we are hungry. Bring on the fish! we are hungry. I call on all of you to gather here, that you may all eat. We come to eat and be merry, not for trouble. We are all good people. I only proclaim the voice of the dead. It was thus that they used to do. My voice is heard by them, and the sound shall go by the trail that is under the ground, by the trail that is over the country, and by the trail that is on the ground. The gambling-songs must be heard to-day in the dance-house. If any are waiting without, come here, come here, come here! We are trading-people, and will trade with you. Many are here, and our hearts are glad. We are not angry, but all are glad. Come on, that you may eat and talk with our people! The smokes from our fires are many. We have food in abundance for all. We will all dance, we will all dance! Come on, come on! Yes, yes, yes! Here, here, here! This was the way those who are dead used to do.[1] Haa-a-a-a-a! Welcome, all! Don't fail to hear me!"

The clown may be connected in some way with the brother of O'nkoito, known as Pe'myeponi, a prominent figure in some of the myths. The Maidu term for "clown" (pehei'pe, pē'pe) is apparently derived, like that of Pe'myeponi, from the usual root for "eating" (pe); and the fact that it is part of the clown's functions and characteristics to be always eating, or referring to eating in some way, strengthens this opinion. A similar clown and spokesman is known to other tribes in this central region of California; and when details from these tribes are available for comparison, the origin and position of the clown among the Maidu may be made more clear. There were often several clowns in a village, and they seem to have held the position for life. The position was not, however, hereditary.

The dances and ceremonials of the Northeastern Maidu seem to be still less developed and numerous than those of the foot-hill people. Apparently all trace of the large series or regular cycle of dances known in the valley is lost; and while one or two of the dances with elaborate feather and other decorations are known, it would seem that they are known only in an abbreviated state. By far the most important of the dances of these Maidu is the wĕ'da-böyem, held every spring, about April. The date is set by the relative advance of the trees and flowers, for all must be green and budding when the dance is held. Knotted cords are sent out, as elsewhere, by the shaman, one string being given to the head of every family. Apparently each village celebrates for itself, and it is not the custom for people to go very far to the ceremony. It is felt, that, when only three or four days remain before the time set, it is almost sure to rain.

---

[1] "This is the way of mortal men" (wonom-maidu).

All having assembled, a day or two is passed in games and gambling. In the morning, then, of the third day or so after the gathering has begun, the women prepare to dance. They wear wreaths of grass and flowers, bunches of fresh green leaves, and vines. In their hands they carry bunches of grass. Standing in a circle out of doors, they dance slowly round and round in contra-clockwise direction. Several others stand outside the circle as singers, and beat time with clapper-rattles. This having continued for some time, a man dresses in a whole bear-skin. He must be a person who has never attended to a dead person or dug a grave. He walks on all-fours, growling, and acting as much as possible like a bear. All the other people stand about and look on, as he thus walks through the village, the children teasing him and shouting at him. After a short time the man throws off his bear-skin, and another man puts it on. The chief then forms all the people in line, with himself at the head, followed by the man wearing the bear-skin, this time walking upright. The men follow, roughly in order of age, and are succeeded by the women and children. All wear flowers and garlands of leaves and grass, and the chief and older men carry wands of various sorts. The man wearing the bear-skin carries

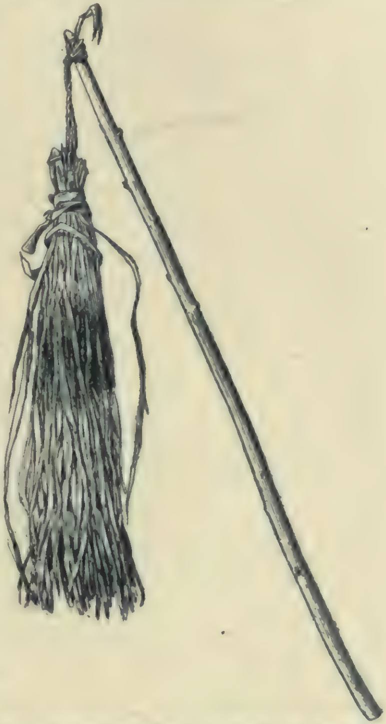


Fig. 67 ($\frac{50}{5237}$ b). Portion of Wand, or Yo'koli, with Maple-bark Tassel. Total length, 39 cm.

wands of maple (Fig. 67), many small tassels of the bark being hung from a wand from one to two metres long. Shamans carry feather wands, or those from which small squares of yellow-hammer feathers depend. The procession now passes slowly around the whole village, in sinistral circuit, the chief at the head, all the while praying and "talking to the country," naming all the spirit places and all the animals, and begging all to be kindly during the ensuing year, asking the bears not to chase people, and the snakes not to bite. On the last circuit every one shouts and throws stones at the houses; and then, at a signal, all run at full speed to the river, and, tearing off their flower, grass, and leaf wreaths, jump in and swim. The wreaths are thrown into the stream, and then all return to the village; and for a day or so gambling and games of various sorts are in order.

When the wĕ′daböyem is being held, on some night either before or after that ceremony, another ceremony is performed, which may also occur at any great gathering of the people at other times of the year. It is always held, however, in connection with the wĕ′daböyem. This other ceremony is known as ka′udom sökö′ndom. A man takes a burden-basket, and accompanied by two or three singers, and several other men carrying long, strong staffs, he goes at night to every house in the village. On entering, the singers stand near the fire. The man with the basket approaches the fire, and sets the basket down. He then dances for a time, as do all the men who carry the sticks. While dancing, he then takes the basket, and, going to every man and woman in the house in turn, presents the basket for a gift of food. If a person refuses to give, one or more of the men with sticks come forward, and, placing the sticks under the reluctant giver, pry him from the ground, and refuse to let him sit in peace until he has given something. Every house having been thus visited, the basket, with the food collected, is taken to the dance-house or largest house where the older people are gambling. Here the food is distributed to the old people. The man wears no ornaments of any sort, nor do the singers or other men who accompany him.

During the winter season, the Sweat dance (ku′mlaidu) is held from time to time. No women may be in the dance-house, although they may look down through the smoke-hole. The men wear only a small grass apron, and, gathering at night, dance in two sections,— one on one side of the fire, and the other on the other. One man is the singer, and stands by the main post, which he strikes with a clapper-rattle. The two parties of dancers, each try to outdo the other in their endurance, and the dancing consists mainly in jumping up and down without moving from the spot. When all is over, all rush out and jump into the river.

In addition to these dances, there are a few of what are called "Feather dances," in which feather decorations are worn. These dances are said to be of several sorts, and seem to resemble the dances of the Northwestern Maidu; but satisfactory information in regard to them has been very difficult to secure. These dances are known collectively as ka′mini, and may be danced at any time, and several times in a season. They are held in the dance-house; and while women may not take part, they may be present inside the house as spectators. In addition to wearing feather bands, feather tremblers, and also apparently feather bunches, the dancers have stuffed mink or otter skins, and hold these in their hands while dancing. When a dance is over, the leader calls out "Enough!" and all cease instantly, holding their stuffed skins high up in front of them. In the dances there seem always to be two parties, both of whom start from the main post, and dance, one on one side of the fire, and the other on the other. It is said that they had feather capes in one dance, but not the mâ′ki costume. A Goose dance is spoken of, but no good description could be obtained. There seems to be no trace of the dances in which the dö head-dress is worn.

It was distinctly stated by the Maidu of this section, that the few "Feather dances" they had were introduced from the foot-hill people in comparatively recent times. How recent the bringing-in of these dances is, is a matter which is hard to determine; and I should be inclined to believe, that, while some may have been borrowed within the period since the coming of the whites, there were always traces of these dances present in this region. Of the clown, there seems to be here no trace, and, as already remarked, the entire dance system is simple and unsystematic. In place of the long, definitely arranged schedule of dances which existed among the Sacramento Valley Maidu, with their varied and elaborate decorations and rather complicated evolutions and imitations of various animals and birds, we have here no schedule at all, merely a single spring festival held out of doors. There is little elaboration of costume, there seems to be little or nothing in the way of representations of spiritual beings, and, except for the single case of the bear in the wĕ′daböyem, no attempts at representing animals or birds. The Sweat dances, and the shamans' meetings, where the shamans conversed with the spirits, played the most prominent part, it would seem, in the ceremonial meetings of this section of the stock. More or less intermediate between this paucity of ceremonial here, and the abundance in the Sacramento Valley region, are the foot-hill people. Among them, although the shaman ceremonials were prominent and of importance, yet there was more of a scheme of ceremonies; and, although they had but a portion of the many dances known to the Chico people, yet they had more than did the mountain people. A more or less gradual transition, then, may be noted in regard to the dance organization of the Maidu, from a definite, elaborate, and extensive series of ceremonies among the western members, to an indefinite, simple, and brief series among the easternmost. From this standpoint, then, we have again evidence of the considerable degree of variation within the limits of this single stock,—a variation which characterizes nearly every feature of its culture, emphasizing again and again the extreme degree of variety which exists in the Californian area.

THE SECRET SOCIETY.—In discussing the various ceremonies of the Maidu, as well as in other connections, mention has been frequently made of the Secret Society. It remains to consider this very characteristic feature of the religious and social life of this people, before passing to a discussion of the mythology.

Among the Sacramento Valley and foot-hill members of the Maidu in the northern portion of their area, there was a society, or series of societies, membership in which was obtained only by a regular initiation, and the position and power of which were considerable. At the present day the institution has to a large extent become extinct, no new members having been initiated for some years, and there is everywhere a strong desire to keep all information in regard to the society secret. The fullest information has been obtained, through the aid of Mr. Spencer, in the foot-hill region, but sufficient has been gained at Chico and elsewhere for purposes of comparison.

In the valley region we find that the Secret Society was an institution of great importance. Its leaders were the leaders, in reality, of the tribe or community, and to a very large extent, if not wholly, regulated the dance organization. Boys were initiated into the society generally at about the age of twelve or fourteen, although in some cases a man was twenty or over before he was selected for a member by the older men. The time chosen for the initiation was during some one of the more important dances. The old men, members of the order, having decided which boys or young men were to be initiated, went at night to their houses, and dragged them out without a word of explanation. They were carried to the dance-house; and the chief and the leader of the society, called here apparently ku′ksū, took each neophyte in turn, and, each holding him by an arm and a leg, walked slowly around the dance-house, swinging the boy gently from side to side as they walked, and singing "Ō′hiya hano" (?). The door of the house was fastened, so that the candidates might not escape. Each candidate was carried thus once around the house, and then placed on the floor, to the north of the drum. When all had been thus treated, the older members of the society danced. If the initiation took place at the time the hĕ′si was being held, the clown talked, turning to the south first, saying, "Wadilna we" (?); to the east, saying, "Pū′na we" (Wintun, būyi, "east"); to the north, saying, "Wai′lna we" (Wintun, waii, "north"); and to the west, saying, "Nō′wina we" (Wintun, nom, "west"). As he spoke thus to each point of the compass, the boys were sent out of the house, under guard each time, and shouted toward that point to which the clown had just spoken. When the four points had been thus addressed, the boys re-entered the house, and the doors were again fastened. For some time the boys had to remain in the house, refraining from all flesh foods, and subject to various regulations not specified. At the close of this period of seclusion, during which the older men had been instructing the boys in the myths and traditions of the people, the hĕ′si dance was held, and the new members were taught the various dances. They had, when they danced for the first time, to dress outside, and come to the dance-house early. They had always to pass to the north of the fire. The older members of the society sat on the south side, and tried to urge the new members to come over to that side. Should any yield and go to the south side, all the new members were driven out, and had to come in again. Each new member came in dancing in a different way. The members of the society alone might wear the netted cap and the feather plume-stick; and there was a special form of this stick which could be worn by the head of the society only. All shamans were, as a rule, members of the society; and most of the men became members sooner or later. Members were known apparently by two terms, either Yō′mbüssi or Yĕ′poni; the former term being used in general for the younger members, the latter for the older.

In the region of the foot-hills the members of the Secret Society, or Yĕ′poni as they are in general called, were, as in the valley, of great importance, and the society still continues more in force here than there. In general, it may be said that each village, or group of villages, had its society, or branch of the whole perhaps, the shaman of each village being usually the leading spirit in the society. No time was set for the initiation into the order; but the candidates were usually over fifteen years of age, and sometimes were middle-aged. Men who were regarded as "bad Indians" were in particular sought for, to initiate; for, if they were not members, they felt freer to harm the people and members than if they were tied to them by the bonds of the society. Hence, if a "bad Indian" could be initiated, the people felt that he was not likely to do them any more harm.

The time for initiating a person, or group of persons, was always at the conclusion of some dance or shamans' meeting. Following is a description of the ceremony. The shaman, seeing one or more persons whom he is desirous of initiating into the society, says to one of the old members, while all are sitting about the dance-house at the end of some dance, "There is so and so, and so and so. This will be a good chance to catch them, and initiate them." The old member then, with an attempt at casualness, moves toward the door, and closes it. All others present then, except members of the society and the persons it is desired to initiate, are made to leave; and the shaman then tells the boys of his purpose to make them members. Should the candidates, however, suspect that the shaman has planned their capture, they may try to run out before the doors can be closed, and thus escape for the time being. Once the doors are closed, however, they may not try to get away. If they succeed in getting away, they laugh at the shaman, and joke him on his failure to secure them; and he, in his turn, declares that he will be more careful another time, and will catch them surely then. The selection of the boys or persons to be initiated is supposed to be made by the spirits; for, immediately preceding the attempted capture, the shaman holds a ceremony in which he asks the spirits to tell him the names of the persons they wish to become members.

As soon as all who are not members of the society are out, and the door again closed, the shaman gives to each of the candidates a wand. This is then hung up in the dance-house, and remains there until all have been fully initiated. All then sit down; and the shaman, taking some sacred meal (composed of a mixture of acorn and birch-seed meal, prepared by the shaman, and prayed over), sprinkles it on the head of each neophyte, and rubs it thoroughly into his hair. All the boys then lie down; and the shaman, taking a lighted brand from the fire in his hand, runs around them as they lie, and around the dance-house several times, passing thus around the boys, and also around the other members present. All then sit up, and water is brought in in a large basket. The shaman next sprinkles some of this water on the face of each candidate, and then wipes their faces dry. This done, the shaman goes out, and tells the people of the village to bring food; and, this being done, all the rest of the food, after the neophytes have been fed, is put in a pile, and one of the new members must call some old member; and the whole is then given to him, to be by him distributed among the old members present. When it is thus divided, each eats his share at once. Then blankets or skins are thrown over the heads of the neophytes, and they are led out to attend to the wants of nature. They may not go outside the dance-house during the whole period of their initiation without having their heads covered thus. When the candidates return to the dance-house, some old member is called on to decide whether all shall smoke on the following day; and then the spirits, speaking through the shaman, ask for some one of the new members to call a "soup" or feast for the tribe. The shaman selects one to do this, and, calling him by name, tells him he must call a "soup." Generally this is given on the next day, and the house is thrown open to all persons; and the new member must pass the soup to all. Then all the new members must be taught the various dances, which occupies several days. The usual time consumed in the initiation is eight days; and when each member has learned the different dances, he is given a new name. During the period of eight days while the initiation is going on, the neophytes may not eat any flesh food. They must use a scratching-stick for their heads. On the third or fourth day one of the older members removes all his clothing, and sits down near the centre of the house. A large basket of water is then brought in; and all the new members fill their mouths with water, and spurt it over the naked man. This done, the clown, who is present at the whole affair, comes forward, and says, "Ho, ho! what is the matter? You have wet this man all over!" He then proceeds to wipe the man dry. This done, the clown washes the face and hands of each new member, and dries them. In the instruction in dancing, each day the candidates must practise much, and are taught generally by the shaman himself. Outsiders may come in and watch. No new member may, during the whole time of the initiation, clap his hands or shout. Every night during the period of initiation, the shaman communes with the spirits, and is supposed to receive from them the new names which the members are to receive at the end of the whole ceremony. When the eight days are up, these new names are given to the new members by the shaman; and he tells them at the same time that they must not hunt or fish for several weeks, neither may they clap their hands or shout loudly. He gives then to each member just admitted a netted cap and a feather plume-stick (dī′hyo), which are the insignia of members. The head may not be washed, nor the sacred meal removed, for several weeks. The wand (yo′koli) given to each at the beginning, and hung during the period of the ceremony in the dance-house, is now given to each member. With this the ceremony is practically over. Some one of the new members, however, now goes to the drum, and, stamping on it for a few moments, announces that he is going to call a "soup" or feast. So soon as this is done, all present exclaim, "That is good! We are all hungry for soup!" Then the new member, assisted by the shaman, makes the strings for his soup, and sends them out. As a rule, each new member gives a soup; and the period after the initiation is therefore one of feasting and prolonged merriment. A common feature of such feasts given by new members is the "grass fight" which closes them, men and women pelting each other with balls of grass. The sacred meal used in the initiation is made by the shaman with much ceremony, apparently, and is kept in a stone mortar, with another inverted over it as a cover. This mortar and meal are regarded as quite sacred, and this is practically the only use to which the mortars are put.

As already stated, each village, or group of villages, sometimes had its section or branch of this Secret Society; and each such unit had its leader or head, known as hū′kū (hū′ūkū?). His functions were to some extent judicial, as he was expected to settle all such disputes as could not be settled in other ways. His power as a shaman to cause disease and death to single individuals or whole villages was great, and exceeded that of any ordinary shaman. To incur his displeasure was greatly feared. Each local section or branch of the society had in its possession a sacred object, which was always kept by the member who was in the position of leader or hū′ūkū. This object was a sort of waistcoat or cape, made of feathers, shells, and pieces of stone (obsidian?), and had in the centre a small mortar of stone. These sacred objects were known as lō′mimūsemtsī, and it was certain death for any one except the leader to touch them. When not in use, the leader's cape was kept, by him in a tule mat or bag secreted in some secure spot far away from the village. At the death of its keeper, it was always buried or burned with him. If, as was sometimes the case, the leader was deposed from his position for failure to act as was thought right, he was still allowed to keep this cape, as no one else would dare to touch it.

The leader was elected or chosen from among the members of the local society, the most noted shaman being always the leader in the ceremony. A "soup" or feast would be called, and to it all members would come. They might not know that this was the occasion of the election of a new leader; but the shaman would have dreamed that it was time for the installation of a new one, and the "soup" would be called really with this end in view. All having assembled, some trifling matters would be discussed till all fell asleep; the meeting being held, of course, in the dance-house. When all were asleep, the shaman would go from one to the other, and place on the forehead of each member a white stripe. When the members awoke, they would then know at once that the real object of the meeting was the election of a new leader, and would be so told by the shaman. At once they began to fast, and only acorn-soup and bread, birch-seed, and wild-oats could be eaten. When all were awake, the shaman began the ceremony by a speech, in which he told his dream, and then sent out several members to get soup for all to eat. In bringing in the soup, they were obliged to use only small baskets, and to go in single file. Women were on no account allowed in the house. All members of the society had to attend such a meeting; and, if any remained away, he had to pay for his absence by giving a "soup" to the whole village. The food having been brought in and partaken of, the members sat on the floor; and the shaman, taking some of the sacred meal, such as was used in the initiation of new members, from the stone mortar wherein it was kept, sprinkled it upon the heads of all present. He also gave to each a small stick to use in scratching the head. Then, taking firebrands in his hands, he ran several times about the seated members, just as in the initiation ceremony. In this case, however, the members, instead of lying down, were seated with hands clasped over the knees. The fire-circuit being completed, the shaman next took his stone pipe, and, filling it with tobacco, blew smoke on the head of each member, rubbing their foreheads at the same time, and saying, "Away off, go away, do not get sick, go away from here, do not stay here!" A basket-song was next sung by two of the best singers. They were seated with a cooking-basket between them, and each held a stick in each hand. With these sticks they beat the basket, which stood inverted. This basket-song was kept up for some time, perhaps an hour or two, and then the shaman made a second speech to the members; and if a clown were present, he would repeat every word after the shaman. During the whole ceremony, from the beginning, no loud talking or clapping of the hands was allowed.

During the first half of the second night, all danced about the fire in silence, no songs or music being permitted. During the latter part of the night, the fire was covered, and the shaman held communion with the spirits, asking them to select from the members present the one who should fill the office of leader. At dawn he would sleep for a short time, and was supposed in this period to dream of the proper person to be chosen for the position. When the shaman waked, he would say, "Ha, ha! I have dreamed. The spirit has told me. All is now plain. Our work has been done well." During the rest of the day, soup would be eaten, and basket-songs sung. At dusk all again danced about the fire, and again the shaman would talk with the spirits. This being over, he would uncover the fire, and start a bright blaze. He then went to his private store of ornaments, and brought out the sacred cape which he had made for the new leader. For some minutes he would swing this over the fire, and address the spirits; and then, going to the member who he had dreamed was to be made leader, he placed the sacred ornament about his neck. Immediately all the other members jumped up, and ran in a circle about the new leader. When they had become quiet, the shaman would talk to the new leader, and tell him what his duties were. He was particular to ask him if he knew the stars of the Dipper, and could by them tell the time at night. Should the new candidate or leader say "No," the shaman would have to sit up alone with the new leader and teach him how to determine the time by the position of this constellation. It was of great importance for him to be able to do this, as at the burnings and in warfare the period just before dawn was the one of greatest importance, and the leader was the person who had to determine when this time had arrived. The ceremony concluded by a feast or "soup" given by the society to all the rest of the village except those members of the society who had not attended the meeting. These were not allowed to take part in any ceremonial or feast until they had each given a "soup" to the whole village at their own expense. Members absent on fishing or hunting parties were excused if they were not present.

Besides the duties already mentioned, the leader had others to perform. He was supposed to look for the most favorable spot for the gathering of acorns, and to make known to the village in a speech where this place was. He had to find out if the trees were within the limits of the land controlled by the village, and, if not, had to negotiate with the village on whose land the trees were, for the privilege of gathering acorns there. This permission was obtained only by means of paying. He was also supposed to make rain when it was needed, to insure a good crop of acorns and a good supply of salmon; and evil spirits and disease or epidemics were driven from the village through his aid. He was also instrumental in inflicting death and disease on the villages of enemies. To do this, he selected certain roots, and, taking these with his sacred cape, he would repair to the vicinity of the village which it was desired to afflict. Selecting a spot whence the wind blew towards the village, he would remove the cape, place it on the ground with the small stone mortar a few centimetres above the earth, and, putting the roots under the mortar, would place some coals on them. As the smoke rose, he would blow it toward the doomed village, saying the while, "Over there, over there, not here! To the other place! Do not come back this way. We are good. Make those people sick. Kill them, they are bad people." When this had been done, he would take the cape, and, going to a stream near by, would place the whole under water, beneath some stone. In going to or coming from such a ceremony, he could not follow any trail, as evil would in such case come to any person passing along. When the sacred cape was thus well hidden, the leader would go to the dance-house, and, holding his cocoon-rattle, he would fast for several days, and sing frequently to the spirits, imploring them to cause sickness and death to the other village, and to protect his own. Should the leader be discovered in his nefarious occupation by persons of the doomed village, the village would at once take steps to try to avert the evil. The shamans of the village would hold a meeting, and roots would be burned in the dance-house for several nights, and dances held in which all the old members of the society and shamans took part. Pepper-wood would be burned, and every house in the village swept with the half-burned branches of this plant. Also various roots would be pounded fine, and blown through flutes toward all parts of the village. All the members of the society would smoke stone pipes, and the shamans sang and shook their cocoon-rattles continuously. None but members were admitted during such times to the dance-house, and the spirits were appealed to continually to remove the evil spell that had been cast. The leader of the village took the most prominent part in the whole affair; and the ceremonies were not intermitted until, in the opinion of the members of the society, the spell had been completely neutralized. When this had taken place to the satisfaction of all, the meeting dispersed; and then for several nights each one, in his own house, sang, and shook the cocoon-rattle.

The further duties of the leader were to light the fires at the burnings and meetings at which the shamans communicated with the spirits. This was always done by the use of the fire-sticks. He was supposed to take a prominent part in war, and the first indication of hostility by any other village was reported at once to him. He had then to look into the matter, and see to the protection of his people. He knew all smoke-signals, and all the signals in the shape of bird or animal cries. He took a prominent part in the war-parties sent out, and often had to lead them in person. He was the repository of the myths and lore of the people; and it was his duty to instruct them in these things by frequent speeches, in which myths would be told, and the various arts known to the people taught to the young. He took to himself all credit for good crops and seasons. He also was supposed to sing at dawn every day certain songs, standing on the roof of the dance-house. The songs were regarded as those of different birds, and there was more or less distinct imitation of the characteristic notes and sounds of several birds singing regularly at daybreak. His duty it was, again, to prepare a poison for the arrows, when the village was going to war with some enemy. The poison was prepared from the mixed bloods of various animals; and when the mixture had begun to decompose, various roots were ground and mixed with it. The arrow-points were then dipped in this, and were regarded as certain to cause a fatal wound.

If the leader were a shaman, he was always called in, in case a person of importance was ill, and assisted any other shamans who might be there. If he were not a shaman himself, he would aid by the singing of songs, and the use of various roots, and the smoking of his stone pipe. If the leader were not a shaman, and desired to become one, he was put through a ceremony known as yō′mekusū. Some shaman who was a member of the society would, either by touch or by placing something in the food of the leader, cause some small animal to enter his body. Such animals or insects were generally mice, crickets, grasshoppers, etc. Should the leader succeed in expelling the animal or extract it himself, he was considered as eligible for the position of shaman or yō′mĕ. If, on the other hand, it required the assistance of some shaman to extract the object, by sucking, then the leader was thought not to be fitted for the task, and was regarded merely as the leader of the society.

The term hū′ūkū is the name used also formerly, it is said, for the pine or boomer squirrel. The name now used for this animal is tū′ūkū. He was, it is said, of great service to the people, in the beginning, in helping them gather pine-nuts and acorns.

Formerly the leader was a person of importance when a village or party of people went to another village for any ceremonial or festival. The entire body of visitors would gather some distance from the place where they were going, and then, formed in procession, under his leadership they would enter the village. This custom has now, however, long been given up.

Mythology.

A series of Maidu myths has already been published in an earlier part of the present volume, and a few others in a separate paper elsewhere.[1] A considerable number of additional myths have since been collected. It is intended to publish all of these later in full as texts, with translations.

From a consideration of the myths of the Maidu thus far obtained, the points of greatest interest are, I think, the considerable degree of system and sequence which is shown by the mythology of this stock; the importance given to the creation episode, and the events connected with it; the sharply contrasted characters of the Creator and the Coyote; the absence of any migration myth; and, lastly, the variety shown within the stock.

---

[1] R. B. Dixon, Some Coyote Stories from the Maidu Indians of California (Journal of American Folk-Lore, Vol. XIII, pp. 267–270).

The systematic quality of Maidu mythology has been noted elsewhere.[1] It was there stated, that, taking the whole series of tales told by the stock, they appeared to follow one another in a more or less regular and recognized order. Beginning with the creation, a rather systematic chain of events leads up to the appearance of the ancestors of the present Indians, with whose coming the mythic cycle came to a close. This mythic era, the betē′ito, seems to fall into a number of periods, with each of which a group or set of myths has to deal. "First, we have the coming of Kō′dōyanpĕ (Earth-Namer) and Coyote, their discovery of this world, and the preparation of it for the 'first people;' next, the creation of these first people, and the making and planting of the germs of the human race, the Indians, who were to come after; third, the long period during which the first people were in conflict, and were in the end changed to the various animals in the present world. In this period Earth-Maker[2] tries to put an end to Coyote, whose evil ways and wishes are in direct contrast to his own. During this period Earth-Maker is aided by O′nkoito the Conqueror, who puts an end to many an evil being and monster who would make life dangerous for men when they should come upon the scene. Lastly comes the period of final conflict, during which Earth-Maker strives for a last time in vain with the Coyote, his defeat, and disappearance toward the East coincident with the appearance of the human race, which bursts forth from the spots where the original pairs had been buried long before."[3]

Of the stories told, a large part belong to the third period, that of the contests and conflicts between the "first people," by which, and because of which, they were nearly all changed into animals. Although within this large group of tales there is not so great a degree of order as prevails in the whole series together, yet even here certain tales follow each other in order, and thus keep within the group that systematic quality observable in the groups as such. Indeed, in this group complete or even partially complete system would be almost impossible, as the tales deal with so large a number of characters that their doings could only at times be interrelated. The whole body of myths, however, appears to form really a unit, and throughout to be connected and logical.

---

[1] R. B. Dixon, System and Sequence in Maidu Mythology (Journal of American Folk-Lore, Vol. XVI, pp. 32–36).

[2] An alternative name for Earth-Namer.

[3] Ibid., p. 32.

The importance given in the Maidu mythology to the creation is another feature characteristic of the stock. The problems of the origin and beginning of things seem to have appealed strongly to the Maidu imagination; and they have not been content to assume a world already created, and ready for occupancy when the ancestors of mankind should reach it after an earlier sojourn elsewhere, as did to a great extent the tribes of the Southwest, for example. Nor is the creation here merely an episode, — a re-creation after a deluge brought on by one cause or another, — as it is in some mythologies. Here the creation is a real beginning: beyond it, behind it, there is nothing. In the beginning was only the great sea, calm and unlimited, to which, down from the clear sky, the Creator came, or on which he and Coyote were floating in a canoe. Of the origin or previous place of abode of either Creator or Coyote, the Maidu know nothing. The Achomā'wi, living next north of the Maidu in the Sierra region, carry their speculations back considerably further, however. They recount how, in the beginning, there was only the illimitable sea and the cloudless sky. Slowly in the sky a tiny cloud began to form, and grew till it reached considerable proportions. Then gradually it condensed, and, becoming solid, became the Silver-Gray Fox, the Creator. Then arose immediately a fog; and from this, as it condensed, and coagulated as it were, arose Coyote. By a process of long-continued and intense thought, the Creator created a canoe, into which both he and Coyote descended, and for long years floated and drifted aimlessly therein, till, the canoe having become moss-grown and decayed, they had, perforce, to consider the necessity of creating a world whereon they might take refuge.

Not only are the origin and creation of the world explained, but also the human race, who, in the form of the myth current among the Northeastern Maidu, were made as tiny wooden figures by the Creator, and planted here and there in pairs, that they might grow in secret and safety during the time of monsters and great conflicts, to burst forth in full strength and stature with the final disappearance of these enemies, and the ending of the mythic era.

One of the most striking features of the myths is the sharp and consistent contrast of the characters of the Creator and Coyote. Throughout the whole series the Creator is uniformly dignified, benevolent, never stooping to trickery, and always striving to make life easy for man, and to render that life deathless and happy. On the other hand, Coyote is at all times opposed to him, striving to render life hard, and insisting that man must die and suffer. Not only does Coyote thus consistently at all times oppose the benevolent desires of the Creator, but he is mischievousness personified, a prince of tricksters, playing tricks on others, and as frequently being tricked himself, and led into innumerable scrapes by his greediness and sensuality.

We have here, it would seem, the complete disassociation of the culture-hero, or Creator, and the trickster elements, which are so often, in American mythology, found more or less closely combined in one person. In his introduction to the "Traditions of the Thompson River Indians of British Columbia," [1] Dr. Boas has discussed the question of these two motives, and has shown clearly how we may discern practically all stages,—from the complete association of the two in one personage, without consciousness of their discrepancy, to almost complete disassociation. He suggests that the early single culture-hero, embodying both elements, was gradually, with the development of civilization and growth of ethical feelings, differentiated into two beings,—one retaining the good elements, the other the bad. This theory,[2] that the change was due to increasing culture, seems, in the present instance, to be a little difficult of application, as the general stage of culture of the people is certainly not very high. As compared with the Micmac myths, the Maidu show, at least as strongly, this disassociation of the two elements; and in their elaboration, and the uniform benevolence of the Creator, and the persistent opposition of Coyote (both contending, not for their own comfort and convenience, but for that of mankind yet to be), we come near a rudimentary dualism. It is to be noted, that, in the contests between the Creator and Coyote, the latter almost invariably comes out the victor. This is, however, not because of his greater power, for it is repeatedly stated that the Creator is in reality all-powerful. Coyote's success is due either to cleverness and trickery, or simply to his insistence on his wishes, and the reiteration of them until, from sheer weariness of contradiction and argument, the Creator yields.

---

[1] Memoirs of the American Folk-Lore Society, Vol. VI, pp. 1–18.

[2] Ibid., p. 7.

Throughout the myths there is nowhere any suggestion that the Maidu had any knowledge of any other region, that they were immigrants in the land where they live. This complete absence of any migration tradition is a feature which is very characteristic, and serves to differentiate the mythology not only of the Maidu, but of most Californian tribes, from that of the Southwest, and much of the eastern portion of the continent.

A last point worthy of mention is the diversity in the mythology, not only within the stock, but within merely that portion of the stock with which we are here chiefly concerned. In the northern portion of the Maidu area we find the myths of the northeastern and those of the northwestern sections differing considerably. In the creation myth, for example, there are important variations; such as, to mention but one or two instances, the absence in the former area of the turtle, and the episode of the diving for the mud, and the absence in the latter region of the incident of the planting of the germs of the human race. Again, while certain tales are common to both regions, there are others which are known apparently only in one, and which, while unknown to the other portions of the stock, are well known in some of the contiguous but linguistically unrelated stocks. That differences as great as these should exist in a region of such limited extent, is of some interest, and in contrast to the much greater uniformity and wide distribution of certain myths throughout much of the rest of the continent. Here, within the area of a single stock, one may pass within twenty miles from one group of myths to another, in which possibly one-half or even two-thirds of the tales are either wholly or noticeably different. Elsewhere, notably in the Plains or on the Northwest coast, the same tales, or even groups of tales, are found extending over several different stocks, in substantially the same form, for many hundred miles. Thus in mythology, as in many other features, the diversity characteristic of California is apparent.

Owing to the paucity of available material from adjacent areas, the time is not yet ripe for a systematic and widespread comparative study of the mythology of the Maidu. From the material available, however, comparisons of some value may perhaps be made. Considering first the immediately contiguous stocks, it is to be observed that we can hardly as yet make comparisons to the east or south. The only material available from the Shoshonean peoples is from the Ute, who shared largely in the culture of the Plains. From the Piutes, Snakes, Bannocks, and other nearer members of the stock, material is almost wholly lacking. Washo and Moquelumnan are in a like plight, so that little or nothing can be done in either of these directions. As regards the Wintun, Yana, and Achomā'wi, the situation is more satisfactory. Beside the material from the first two of these stocks published by Curtin,[1] a considerable mass of myths has been collected by the writer and other members of the Huntington Expedition from all three of the stocks, and from the Shasta as well. Comparisons may therefore be made with more advantage in these directions.

In view of the diversity obtaining within the Maidu stock itself, it would be expected that equal or greater diversity would prevail between different stocks. To a certain extent this is true; and each of the five stocks, Maidu, Wintun,

---

[1] Curtin, Creation Myths of Primitive America. Boston, 1898.

Achomā'wi, Yana, and Shasta, shows a rather definite individuality. On the other hand, a considerable degree of similarity would naturally occur. Thus, as regards the creation myth, the Maidu, the Achomā'wi, and the Yana agree in their general type; in all, the Creator and Coyote are the chief figures; in all, the primeval sea is the beginning of all things, and on its surface the world is floating; in all, the Creator and Coyote strive for mastery, the former a consistently benevolent being, the latter uniformly a trickster and knave; in all, Coyote wins, checkmating the Creator at every turn, and is successful in his attempts to make the world one of distress, pain, and death. There is abundant difference in detail, but the underlying thought seems in all these stocks to be the same. With the Wintun there is, strangely enough, less in common as regards the creation myth. The so-called "Patwin," or southern section of the Wintun, show indeed some agreement with the forms of the myth current among the Northwestern Maidu, yet on the whole differ rather strongly, most noticeably in the relative absence of the struggle between the Creator and Coyote. The Northern Wintun, so far as material available indicates, are still less in accord, and in their creation myth diverge markedly from the Maidu type. The Shasta also have a creation myth, not only quite different from the Maidu, but also very brief and undeveloped. It shows, moreover, almost nothing of the antagonism between Creator and trickster, Coyote here being to a great extent Creator and trickster in one.

Passing to other myths, we find, on the whole, the same general relationships between the stocks. The theft of fire, for instance, assumes somewhat variant forms, but in the group including the Maidu, Achomā'wi, and Yana, is constructed always on very similar lines. In all, the fire is held by a man and his daughters, and is discovered largely through the agency of the Lizard; the fire is watched and guarded by a sentinel bird, is stolen in consequence of his sleeping while on guard, and pursuit by the women is hindered by the strings of their skirts being cut as they sleep. The fire is brought back by a group of animals, among whom the fire is divided for safety; and the pursuers, who are usually Thunder, and his two daughters Rain and Hail, are put to flight. In this case the Wintun shows considerable similarity in the southern section; but in the northern portion, and also among the Shasta, the myth is quite different. Other tales showing equal or greater similarity are found within the group mentioned, such as the stories of the Loon-Woman,[1] the Bear and Deer,[2] the sisters sent to marry the stranger, etc.

In the stories told of Coyote, where his character as a trickster and knave comes out clearly, particularly those relating to his amorous escapades, the agreement is particularly strong. With the Wintun the agreement in myth and incident is much less marked, the Northern Wintun showing little or nothing in common with Maidu forms. The same holds true to a considerable extent in the case of the Shasta; although here we find the Loon-Woman in a modified form, as well as several of the typical Coyote stories.

So far, then, as the myths are concerned, the similarity is most marked between the Maidu, Achomā'wi, and Yana; and these seem to fall into a group distinguished rather clearly from the surrounding stocks. The Shasta myths are closely connected, in some cases, with those of the Achomā'wi, but the points of agreement are generally precisely those in which the Achomā'wi differ from the Maidu. Thus, while there is connection between the Maidu type and the Shasta, it is not close. As regards the Wintun, the southern portion seems to show some likeness to the immediately adjacent section of the Maidu, whereas the Northern Wintun are of a quite different type.

Many tales, although common to several stocks, are known, however, only in the immediately adjacent portions of those stocks; as, for example, the Loon-Woman, which seems to be known only to the Yana, Achomā'wi, and Northeastern Maidu, no trace having been yet found of it among the remainder of the stock.

In attempting to extend comparisons northward or westward, we are again met by the difficulty that little or no material is available. From the stocks lying to the westward a large body of material has been collected by Dr. A. L. Kroeber and Dr. P. E. Goddard.[1] It would appear that, in general, the mythology of the Hupa, Wishosk, and the Lower Klamath River stocks was quite different in type from that which is characteristic of the Maidu group. Pomo and Yuki, on the other hand, show some relationship with the Southern Wintun, and are through it thus distantly related to the Maidu.

---

[1] See p. 71 of this volume; Curtin, Creation Myths, p. 407.

[2] See p. 79 of this volume.

Northward almost a complete blank exists. Except for the few myths published by Gatschet,[2] from the Klamath, and which seem to differ considerably from the Maidu type, there is nothing available till we reach the Columbia, where, with the Chinook,[3] the Kathlamet,[4] and the Tillamook,[5] comparisons may be made. Comparing the Maidu myths with those of these tribes, and of others farther afield in Washington, British Columbia, and elsewhere, it appears that nowhere within this area do we find quite so complete a disassociation of the trickster and culture-hero elements as exists among the northeastern Californian tribes; nor, moreover, do we find that the creation anywhere assumes such an important place. Considering specific myths and incidents, it appears that some have a wide distribution. The two tales which have perhaps the widest range are those of the Bear and Deer[6] and the girls who married the stars. The former has been recorded among the Kwakiutl,[7] the Klamath,[8] the Kathlamet,[9] the Catloltq,[10] and the Thompson River Indians;[11] the latter, among the Quinault,[1] the Lkungen,[2] the Chilcotin,[3] the Dakota,[4] the Micmac,[5] etc.

---

[1] Goddard, Hupa Texts (University of California Publications, Amer. Arch. and Ethnol., I, No. 2). Berkeley, 1904.

[2] A. S. Gatschet, The Klamath Indians of Southwestern Oregon (Contributions to North American Ethnology, Vol. II, Part 1). Washington, 1890.

[3] Franz Boas, Chinook Texts (Bulletin Bureau of American Ethnology, No. 20). Washington, 1894.

[4] Boas, Kathlamet Texts (Bulletin Bureau of American Ethnology, No. 26). Washington, 1901.

[5] Boas, Traditions of the Tillamook (Journal of American Folk-Lore, Vol. XI, pp. 23, 133).

[6] See p. 79 of this volume.

[7] Boas, Indianische Sagen, p. 168.

[8] Gatschet, Klamath Indians, p. 118.

[9] Boas, Kathlamet Texts, p. 118.

[10] Boas, Indianische Sagen, p. 81.

[11] Teit, Traditions of the Thompson River Indians (Memoirs of the American Folk-Lore Society, Vol. VI, p. 69).

If we consider incidents instead of whole myths, we find, that whereas a few similarities to the Maidu may be traced among the Chinook and Salish tribes of the coast, a much larger number are apparent among the Salish of the interior, particularly the Thompson River Indians. Among the Chinook and Kathlamet and the Tillamook and Quinault, almost the only incidents in common with the Maidu are those which relate to the exploits of Coyote. We have, for instance, his asking advice of his excrement,[6] the raping of the girls in bathing,[7] and of the sick girl whom he pretends to doctor.[8] The resuscitation of the dead by placing the bones or bodies in water is also common.[9] Turning to the tribes of the interior, we find greater similarity, both of myth and incident. Not only do two entire myths occur here which are closely like the Maidu, — the Grisly Bears and the Black Bears,[10] and the Mosquito and the Thunder,[11] — but a number of incidents. The similar incidents deal in part with Coyote, but also refer to other personages, such as the ferryman who kills travellers who have to jump into his boat,[12] or the suitor who is forced to spear a monster that drags him into the stream.[13]

It appears from this, that the analogies between the Maidu myths and those of other stocks to the north are rather closer with the tribes of the interior than with those of the coast; and that in general, the Maidu, with the Achomā'wi and probably the Yana, are to be classed, from the mythological standpoint, with the stocks occupying the northern portion of the interior plateau or Great Basin area.

---

[1] Farrand, Traditions of the Quinault (Memoirs American Museum of Natural History, Vol. IV, p. 107).

[2] Boas, Indianische Sagen, p. 62.

[3] Farrand, Traditions of the Chilcotin (Memoirs American Museum of Natural History, Vol. IV, p. 31).

[4] Riggs, Dakota Grammar (Contributions to North American Ethnology, Vol. IX, p. 83).

[5] Rand, Legends of the Micmacs, pp. 160, 308.

[6] Boas, Chinook Texts, p. 101.

[7] Boas, Traditions of the Tillamook, p. 140.

[8] Ibid., p. 141.

[9] Farrand, Traditions of the Quinault, p. 83.

[10] Teit, Traditions of the Thompson River Indians, p. 69; cf. also p. 79 of this volume.

[11] Ibid., p. 56.

[12] Ibid., p. 39; cf. p. 48 of this volume.

[13] Ibid., p. 40; cf. p. 79 of this volume.

CONCLUSION.

The Maidu, whose culture has here been described, may to a great extent be taken as typical of the Indians of the central portion of California. A sedentary people, living in numerous small villages of circular, semi-subterranean, earth-covered lodges, they were a people among whom the arts, except that of basketry, were but slightly developed, and who depended on the chase, and the native nuts, fruits, seeds, and roots, for food. Possessed of a social organization of a simple kind, they show no trace of gentile groupings. They have, however, in some parts at least, secret societies which are partly religious, partly social, in their character. With the shaman the dominant figure in their religion, they have, where in contact with the Wintun tribes, developed elaborate dance ceremonies, and everywhere celebrate important ceremonials at which offerings are burned for the dead. Their mythology is moderately voluminous, characteristically systematic, and lays much stress on the creation, both of the world and of mankind.

As stated already, no tribe is wholly typical in a region of such diversity as California; but in the general simplicity of their culture, lack of development of the arts, dependence on roots, acorns, seeds, fruits, and game for food, rudimentary social organization, and general character of their ceremonial life, the Maidu represent as well as any the culture of this portion of the State.

Yet, as has been pointed out again and again, even within this single stock, significant variations occur; so that the Northeastern, the Northwestern, and the Southern Maidu show in many features differences as great as, or greater than, those to be noted between the Maidu and the neighboring stocks. Culturally, indeed, the several sections of the Maidu are closely affiliated to their immediately adjacent neighbors; the Northeastern having much in common with the Achomā'wi, the Northwestern with the Southern Wintun, and the Southern Maidu with the Moquelumnan.

In the midst of such variety, it is difficult to say what are the real characteristics of this stock. Are we to regard the Maidu of the Sacramento Valley, with their elaborate dances and secret society, as the type from which the Northeastern Maidu have differentiated by assimilating themselves more and more to the type of the Achomā'wi and Shoshone, the type of the interior plateaus or Basin area? Or are we to consider the simpler, more typically Basin culture of the Northeastern Maidu as characteristic of the stock, and the elaborate dances and secret-society organization of the Northwestern branch as due to contact with the Wintun tribes of the middle and lower Sacramento Valley? Again, what relation do both of these northern sections bear to the Southern Maidu, where we find the culture in many important regards much different from that in the north? Should the variations be explained as due in part to migration, or as having wholly arisen by a slow process of differentiation and assimilation to neighboring types? From the comparison of the myth cycles of the Northeastern and Northwestern Maidu, I have already pointed out[1] that we might suppose there had been a movement of the former section eastwards from the area of the Sacramento Valley. Taking the whole mass of the myths from the Northeastern Maidu, references to the north are almost as common as those to the west and southwest; but whereas the former are in nearly all cases in myths which refer to times considerably after the creation, the latter are almost wholly in the creation myth. As has been already pointed out, there is a complete absence, apparently, of any sort of a migration legend. all portions of the stock declaring emphatically that they originated precisely in their present homes. While placing the creation of the world uniformly in the vicinity of Durham, in the Sacramento Valley, the Northeastern Maidu, for example, declare they are the descendants of the pairs of human germs planted by the Creator in the lands which they now occupy, and that from that day to this they have continued to live in the region where their ancestors came into being.

If any weight be given to the evidence above referred to from the myth cycles, of an easterly movement of the stock, this movement would seem to have taken place either before the acquirement by the Maidu of the secret-society organization and elaborate dances, or so long ago that all knowledge or remembrance of these has passed away from the members of the Northeastern section.

---

[1] Dixon, Journal of American Folk-Lore, Vol. XVI, p. 35.

The variety in culture, both within and without the stocks in California, is certainly one of the most striking features of the region. In large measure this would seem directly traceable to the environment. As compared with regions farther south, east, and north, the sharp contrasts in environment, both topographic and climatic, are marked. All intermediate types may be found between the immense, perfectly level plains of the Sacramento and San Joaquin Valleys, and the rugged topography of the Sierra, with its sharp steep ridges, separated by canyons of great depth; and all varieties, from the cool, wet climate of the northwestern coast to the arid heat of the Mohave Desert. Within the Maidu area alone, there are, as has been said, great differences; and in addition, each of the three main sections of the stock were more or less isolated from one another. The Northeastern Maidu were cut off from their westerly neighbors, during the winter by the great snow-belt of the western flanks of the Sierras, and in summer by many a mile of ridge and forest. The different villages of the foot-hills were in many cases separated effectively by the deep, rugged canyons which intervened, and often villages located within sight of each other on opposite sides of the same canyon had minor differences in custom and in speech. Placed in such varying environment, often much isolated, in some cases by natural features, in others by lack of tribal feeling such that each village almost regarded its neighbors as enemies,—under such conditions, it is not surprising that differentiation took place, and that what may have been in the beginning a unit in culture and speech, became in course of time split up into many variant forms.

It is to be noted, also, that not only among the Maidu, but among practically all the other stocks within the State, the varied forms of culture observed are in all cases in harmony with the environment, and that the areas of similar culture are continuous, all of which tends to strengthen the belief that in the main such differences as are found have been of slow local growth, and are not due to movements of population on any considerable scale. Moreover, the accordance of culture with environment, and the continuity of the areas of similar culture, irrespective of linguistic boundaries, are evidence of long-continued occupation of the region by its present occupants. It is, moreover, in these very features, that the Maidu, and with them most of the other stocks of the Californian area, differ from the stocks and tribes of the central and eastern portions of the continent; for whereas the tribes of the latter areas have been migratory on a large scale, and show over great areas a considerable degree of uniformity in culture, the Californian peoples, of nearly all of which in these particulars the Maidu may stand as a representative, exhibit, on the contrary, great stability, coupled with a correspondingly great variety.

IV.—ANTHROPOMETRY OF CENTRAL CALIFORNIA.

By Franz Boas.

Plates L.–LVIII.

The material for the following study was collected by Dr. Roland B. Dixon in 1899 and 1900 in connection with the work of the Huntington California Expedition, and by Mr. V. K. Chesnut in 1892 and 1893 in connection with the extended anthropometrical investigation carried on under the direction of the writer for the Anthropological Department of the World's Columbian Exposition, under authority of Prof. F. W. Putnam, Chief of the Department.

Mr. Chesnut's first measurements were taken in August, 1892, in the Round Valley Reservation. The results seemed so peculiar that I feared some error of method might have vitiated them. For this reason I asked Mr. Chesnut to revisit the reservation, repeat the measurements, and obtain an additional series. This second series of observations were taken in January, 1893.

The following table shows the results of Mr. Chesnut's measurements on the same individuals. The first figure in each column represents the first measurement; the second figure, the amount to be added to the first measurement to obtain the second.

No.	Length of Head.	Breadth of Head.	Width of Face.	Height of Face.	Height of Nose.	Width of Nose.
Males.						
5	182 + 2	150 - 2	146 + 3	122 - 4	53 - 5	44 + 0
30	193 + 2	152 - 2	150 - 3	118 + 0	50 - 2	40 + 0
34	209 - 9	155 + 2	144 + 3	123 - 2	55 - 1	43 + 1
78	187 - 1	163 + 2	151 + 2	123 - 4	55 - 2	42 + 1
98	181 + 3	152 - 2	138 + 3	111 + 1	52 - 5	41 + 1
104	188 - 1	157 + 0	146 - 7	110 + 0	47 + 1	42 + 2
155	195 + 2	160 - 1	147 + 5	123 + 2	58 - 1	42 - 2
190	192 + 2	155 - 3	142 + 0	112 + 3	49 - 4	39 + 0
201	174 + 2	143 + 1	117 + 3	86 + 2	35 - 1	32 + 0
202	179 - 13	141 + 1	122 + 4	93 + 2	40 - 4	33 + 0
214	205 + 2	157 + 3	150 + 2	112 + 6	46 - 0	39 + 2
Females.						
45	177 - 2	142 - 1	131 - 1	109 + 0	43 + 1	35 + 2
48	192 + 1	152 - 2	135 + 0	108 + 1	42 + 3	38 - 3
85	171 + 4	139 + 2	126 + 3	94 + 5	44 - 4	32 + 3
99	169 + 7	144 + 0	140 + 2	102 + 6	40 + 3	38 + 2
136	181 + 0	145 - 6	134 + 2	105 - 1	44 + 1	40 + 0
137	180 + 4	140 - 1	137 + 3	105 + 2	46 - 7	36 + 0
151	189 - 7	149 - 1	140 - 5	101 + 1	42 - 1	38 + 0
174	174 - 5	137 + 1	112 + 3	85 + 1	37 - 1	30 + 1
179	190 - 1	152 + 1	137 + 3	105 + 6	42 + 0	37 + 0
180	189 + 2	144 - 2	130 + 7	106 - 5	43 - 1	34 - 1
187	183 - 1	146 + 4	130 + 2	91 + 7	36 + 1	34 + 1
195	189 + 5	152 + 1	137 - 4	103 + 0	45 - 5	33 + 1
196	176 + 3	140 + 4	135 + 2	100 + 0	47 - 3	34 + 1
198	194 + 0	151 - 1	136 + 5	104 + 0	44 - 2	44 - 3
207	178 + 0	153 + 2	133 + 3	104 - 1	46 - 4	37 - 5
208	187 + 3	143 + 3	136 + 1	107 + 2	49 + 1	41 + 1
211	168 - 2	134 + 0	118 - 8	79 + 3	31 + 0	30 + 1
Aver. Diff.	+ 0.1	+ 0.1	+ 1.2	+ 1.2	- 1.6	+ 0.2

The square variability of these differences is equal to twice the square of the error of measurement ϵ^2. Thus we find for ϵ^2:

Measurement.	ϵ^2
Length of Head	9
Breadth of Head	2.8
Width of Face	6.4
Height of Face	4.6
Height of Nose	3.2
Width of Nose	1.5

It would seem that in the measurement of length of head for Nos. 34 and 202 the centimetres were misread, which would account for the high error.

For a comparison of Dr. Dixon's and Mr. Chesnut's measurements only six individuals are available. In the following table Dr. Dixon's measurements are given, and the amount to be added to obtain Mr. Chesnut's measurements. There seems to be a constant difference between the two measurements of length of face; otherwise the differences are so small that they may be neglected.

	Length of Head.	Breadth of Head.	Width of Face.	Height of Face.	Height of Nose.	Width of Nose.
9	196 − 1	154 − 0	152 − 5	119 − 3	46 + 2	39 − 1
20	202 − 4	163 − 2	150 + 0	119 − 9	49 − 1	47 − 2
21	192 + 0	152 − 2	149 − 4	116 − 1	49 + 1	46 − 2
100	199 − 2	154 − 2	146 − 3	122 − 6	51 + 0	40 + 0
155	199 − 4	162 − 2	150 − 3	128 − 5	60 − 2	40 − 2
161	200 + 7	157 − 4	136 + 1	118 − 1	53 − 2	38 + 1
Average Diff.	−0.7	−2.0	−2.3	−4.2	−0.3	−1.0

The tabulation of Mr. Chesnut's measurements gives very variable results, which differ fundamentally from all the results obtained among the neighboring tribes. I have called attention to this phenomenon before.[1] With the assistance of Dr. Dixon and Dr. A. L. Kroeber, I have been able to subdivide the material according to tribes. In this manner it has been possible to determine the geographical position of the disturbing element more accurately.

I have divided the material into the following groups: Maidu of the Sacramento Valley, Maidu of the Foot-Hills, Maidu of the Mountains, Pit River Indians, Pomo, Yuki, Wintun. Besides these, there are a few isolated measurements.

Following is a tabular statement of the measurements of the more important groups.

---

[1] Verhandlungen der Berliner anthropologischen Gesellschaft, 1895, pp. 401, 402.

MEASUREMENTS OF MEN.

STATURE. Men between 19 and 60 years inclusive.						STRETCH OF ARMS.						HEIGHT OF SHOULDER					
	Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.		Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.		Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.
150	—	149–1	—	—	1	160	—	2	—	—	159–2	120	—	—	—	—	—
151	—	—	—	—	—	161	—	—	—	—	1	121	—	1	—	—	—
152	—	—	—	—	2	162	—	2	—	—	4	122	—	—	—	—	—
153	—	—	—	—	2	163	—	—	—	—	1	123	—	—	—	—	—
154	—	—	—	—	—	164	—	1	—	—	—	124	—	1	—	—	1
155	—	—	—	—	2	165	1	—	—	—	2	125	—	—	—	—	1
156	—	—	—	—	—	166	—	2	—	—	—	126	—	1	—	—	—
157	—	1	—	—	2	167	1	2	—	—	1	127	—	—	1	—	1
158	—	1	1	—	—	168	1	2	—	—	—	128	—	—	—	—	4
159	1	1	—	—	1	169	—	1	—	—	1	129	—	—	—	—	1
160	2	1	—	—	—	170	—	1	—	—	—	130	—	1	—	—	2
161	—	2	—	1	2	171	—	2	1	—	1	131	2	1	—	—	—
162	—	4	—	—	2	172	—	1	—	—	1	132	2	2	—	—	—
163	—	2	—	—	—	173	1	—	2	—	—	133	—	—	—	—	—
164	1	1	1	—	—	174	—	—	—	2	1	134	—	—	—	1	4
165	—	4	2	2	1	175	—	—	—	—	—	135	—	5	2	—	—
166	—	—	—	—	—	176	—	—	1	1	1	136	—	5	—	1	—
167	—	—	1	—	—	177	—	1	1	1	—	137	—	1	1	1	—
168	—	—	1	—	—	178	—	2	1	—	—	138	—	2	1	1	1
169	—	3	—	2	—	179	—	2	1	—	—	139	—	—	1	1	—
170	—	1	2	—	—	180	—	3	1	—	—	140	—	1	2	—	—
171	—	—	—	—	—	181	—	—	—	1	—	141	—	1	—	—	—
172	—	—	1	—	—	182	—	—	1	—	—	142	—	1	—	—	—
173	—	—	—	—	1	183	—	—	—	1	—	143	—	—	1	—	1
174	—	1	—	—	—	184	—	—	—	—	—	144	—	—	—	—	1
175	—	—	—	—	1	185	—	—	—	—	—	145	—	1	—	—	—
176	—	1	—	—	—	186	—	1	—	—	—	146	—	—	—	—	—
177	—	—	—	—	—	187	—	—	—	—	1	147	—	—	—	—	—
178	—	—	1	—	—	188	—	—	1	—	1	148	—	1	—	—	—
179	—	1	1	—	—	189	—	—	—	—	—	149	—	—	—	—	—
180	—	—	—	1	—	190	—	—	—	—	—	150	—	—	1	1	—
						191	—	—	1	—	—	151	—	—	1	—	—
Cases.	4	25	11	6	17		4	25	11	6	18		4	25	11	6	17
Aver.	160.7	164.4	168.7	168.2	159.0		168.2	171.2	178.9	177.5	168.0		131.5	135.2	139.5	139.0	131.7

MEASUREMENTS OF MEN.

LENGTH OF ARM.						HEIGHT SITTING.						WIDTH OF SHOULDERS.					
	Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.		Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.		Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.
												31					
												32					
												33	—	—	—	—	1
						79	—	1	—	—	2	34	1	—	—	—	—
65	—	1	—	—	—	80	—	—	—	—	3	35	—	4	1	—	3
66	—	2	—	—	—	81	—	—	—	—	2	36	2	3	1	—	4
67	1	—	—	—	1	82	—	2	—	—	1	37	1	5	—	1	2
68	—	—	—	—	—	83	1	3	—	—	2	38	—	6	1	3	8
69	—	1	—	—	1	84	2	—	—	—	2	39	—	3	2	1	—
70	—	2	—	—	4	85	—	3	—	—	1	40	—	2	1	1	—
71	1	4	—	—	3	86	1	2	—	2	1	41	—	1	3	—	—
72	—	4	—	—	1	87	—	3	1	1	1	42	—	1	2	—	—
73	—	2	1	—	1	88	—	3	2	1	—	43					
74	1	2	1	2	2	89	—	1	2	1	—	44					
75	—	1	3	1	—	90	—	1	1	—	1						
76	1	2	1	1	2	91	—	1	2	—	1						
77	—	—	1	1	1	92	—	2	—	1	—						
78	—	3	1	1	—	93	—	—	1	—	—						
70	—	—	1	—	1	94	—	—	—	—	—						
80	—	—	1			95	—	—	2								
81	—	1	—														
			87—1														
Cases.	4	25	11	6	17		4	22	11	6	17		4	25	11	6	18
Aver.	72.0	72.6	77.2	75.7	72.4		84.2	86.3	90.5	88.0	83.2		36.0	37.6	39.5	38.3	36.7

MEASUREMENTS OF MEN.

	LENGTH OF HEAD.											WIDTH OF HEAD.									
	Maidu of Sacramento Valley.		Maidu of Foot-Hills.		Maidu of Mountains.	Pit River.	Pomo.		Yuki.			Maidu of Sacramento Valley.		Maidu of Foot-Hills.		Maidu of Mountains.	Pit River.	Pomo.		Yuki.	
	Dixon.	Chesnut.	Dixon.	Chesnut.	Dixon.	Dixon.	Dixon.	Chesnut.	Dixon.	Chesnut.		Dixon.	Chesnut.	Dixon.	Chesnut.	Dixon.	Dixon.	Dixon.	Chesnut.	Dixon.	Chesnut.
180	—	—	—	—	—	—	—	—	—	—	140	—	—	—	—	—	—	—	—	—	137–1
181	—	—	—	—	—	—	—	—	—	—	141	—	—	—	—	—	—	—	—	—	140–1
182	—	1	—	—	—	—	—	1	—	—	142	—	—	—	—	—	—	—	—	—	1
183	—	—	1	—	—	—	—	—	—	—	143	—	—	1	—	—	—	—	—	—	1
184	—	—	1	—	—	—	—	—	—	1	144	—	—	—	1	—	—	—	—	—	1
185	—	—	—	—	—	—	—	—	—	1	145	—	—	—	—	—	—	—	1	—	2
186	—	—	1	—	—	—	—	1	—	—	146	—	—	2	—	—	—	—	1	—	—
187	—	—	1	1	—	—	—	2	—	—	147	—	—	1	—	—	—	—	—	—	—
188	1	—	—	—	—	—	—	—	—	—	148	—	—	—	—	—	—	—	—	—	4
189	—	—	—	—	1	—	—	—	—	—	149	—	—	1	1	—	—	—	—	—	2
190	2	—	2	—	1	—	—	—	—	3	150	—	1	1	1	—	—	—	1	—	3
191	—	—	1	—	—	—	1	1	—	2	151	—	—	—	2	—	—	—	1	—	2
192	—	—	4	2	2	—	—	—	—	2	152	—	—	2	—	—	—	—	—	—	—
193	—	—	1	1	—	1	—	—	—	2	153	1	—	—	—	1	—	—	1	—	1
194	—	—	—	—	2	—	—	—	—	1	154	—	—	2	2	—	—	—	—	1	1
195	1	—	—	—	1	—	—	—	—	—	155	—	—	1	2	—	—	—	—	—	1
196	—	—	1	2	—	—	—	1	—	2	156	—	—	2	1	1	—	—	—	—	—
197	—	—	1	1	1	—	—	—	—	1	157	1	—	—	—	1	1	1	—	—	1
198	—	—	—	2	—	—	—	—	—	—	158	1	—	1	—	3	—	—	—	—	—
199	—	—	1	1	—	1	—	—	1	—	159	1	—	—	—	1	—	—	—	—	—
200	—	—	1	—	—	—	—	1	—	3	160	—	—	1	1	—	—	—	—	—	—
201	—	—	—	—	—	1	—	—	—	1	161	—	—	—	—	—	2	—	—	—	—
202	—	—	1	—	—	—	—	—	—	1	162	—	—	—	—	—	—	—	—	—	—
203	—	—	—	—	—	—	—	—	—	1	163	—	—	1	—	—	—	—	1	—	—
204	—	—	—	—	—	—	—	—	—	—	164	—	—	—	—	1	—	—	—	—	—
205	—	—	1	—	—	—	—	—	—	—	165	—	—	—	—	—	—	—	—	—	—
206	—	—	—	1	—	—	—	—	—	—	166	—	—	1	—	—	—	—	—	—	—
207	—	—	—	—	—	—	—	—	—	1	167	—	—	1	—	—	—	—	1	—	—
Cases.	4	1	18	11	8	3	1	7	1	22		4	1	18	11	8	3	1	7	1	22
Aver.	190.7	182	192.8	196.0	193.0	198.0	191.0	190.0	199.0	195.0		157.0	150.0	154.1	152.6	158.0	160.0	157.0	153.6	154.0	148.0

MEASUREMENTS OF MEN.

WIDTH OF FACE.

	Maidu of Sacramento Valley.		Maidu of Foot-Hills.		Maidu of Mountains.	Pit River.	Pomo.		Yuki.	
	Dixon.	Chesnut.	Dixon.	Chesnut.	Dixon.	Dixon.	Dixon.	Chesnut.	Dixon.	Chesnut.
135	—	—	—	—	—	—	—	—	—	—
136	—	—	1	—	—	—	—	—	—	—
137	—	—	1	1	—	—	—	—	—	—
138	—	—	1	—	—	—	—	—	—	—
139	—	—	1	—	—	—	—	—	—	—
140	—	—	—	—	—	—	1	—	—	1
141	—	—	2	1	—	—	—	—	—	—
142	1	—	—	1	—	—	—	1	—	1
143	1	1	2	—	—	—	—	—	—	1
144	—	—	—	1	—	—	—	—	—	3
145	—	—	1	1	—	—	—	—	—	2
146	2	—	—	2	1	—	—	—	1	3
147	—	—	1	1	1	—	—	—	—	2
148	—	—	1	1	1	—	—	—	—	2
149	—	—	1	2	1	—	—	2	—	3
150	—	—	1	—	2	—	—	—	—	3
151	—	—	—	—	—	1	—	2	—	—
152	—	—	1	—	1	1	—	1	—	—
153	—	—	1	—	1	—	—	—	—	—
154	—	—	—	—	—	1	—	—	—	1
155	—	—	1	—	—	—	—	1	—	—
156	—	—	1	—	—	—	—	—	—	—
157	—	—	1	—	—	—	—	—	—	—
Cases:	4	1	18	11	8	3	1	7	1	22
Averages:	144	143	146.1	145.0	149.4	152	140	150	146	146.6

MEASUREMENTS OF WOMEN.

STATURE.					LENGTH OF HEAD.					WIDTH OF HEAD.				
	Maidu of Foot-Hills.	Maidu of Mountains, Pit River.	Pomo.	Yuki.		Maidu of Foot-Hills.	Maidu of Mountains, Pit River.	Pomo.	Yuki.		Maidu of Foot-Hills.	Maidu of Mountains, Pit River.	Pomo.	Yuki.
141	—	—	—	130- 1	171	—	—	—	—	136	—	—	—	1
142	—	—	—	—	172	—	1	—	—	137	1	—	1	2
143	—	—	—	—	173	1	—	—	—	138	—	—	—	1
144	—	—	—	3	174	—	—	2	—	139	—	—	—	—
145	—	—	—	—	175	—	—	—	—	140	—	—	—	1
146	—	—	—	1	176	—	—	1	1	141	1	—	—	2
147	—	—	—	1	177	1	—	1	—	142	—	—	1	—
148	—	—	—	1	178	—	2	1	1	143	—	—	1	1
149	2	—	—	3	179	—	—	1	1	144	1	—	—	2
150	1	—	1	1	180	—	—	—	1	145	—	—	2	2
151	—	—	—	—	181	—	—	—	1	146	1	—	1	—
152	—	—	—	2	182	—	—	—	2	147	2	—	—	2
153	—	—	2	1	183	—	—	—	—	148	1	1	1	2
154	3	2	—	2	184	1	—	—	2	149	—	—	1	—
155	—	—	1	—	185	1	1	1	3	150	—	2	—	1
156	2	1	1	1	186	—	—	2	1	151	—	—	1	—
157	—	—	—	—	187	—	1	1	1	152	1	—	1	—
158	1	1	1	—	188	3	1	—	—	153	1	—	—	—
159	—	2	1	—	189	—	—	—	—	154	—	—	—	—
160	—	1	—	—	190	—	—	1	1	155	—	—	—	—
161	—	—	—	—	191	1	1	—	1	156	—	—	—	—
162	—	—	—	—	192	1	—	—	—	157	—	1	—	—
163	—	—	1	—	193	—	—	—	—	158	—	—	—	1
164	—	—	—	—	194	—	—	—	1	159	—	—	—	—
165	—	—	1	—	195	—	—	—	1	160	—	1	—	—
										161	—	1	1	—
										167		1		
Cases:	9	7	9	17		9	7	11	18		9	7	11	18
Aver.	153.3	157.3	156.9	148.8		185.0	182.7	181.0	184.6		145.1	156.0	147.2	143.8

MEASUREMENTS OF WOMEN.

WIDTH OF FACE.

	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.
130	—	—	—	3
131	—	—	—	—
132	1	—	—	—
133	1	—	1	—
134	1	—	2	3
135	4	—	—	1
136	—	—	1	3
137	—	1	2	2
138	1	—	1	1
139	—	—	—	—
140	1	1	1	—
141	—	—	—	3
142	—	1	1	—
143	—	2	1	—
144	—	—	—	1
145	—	—	—	1
146	—	—	—	—
147	—	—	1	—
148	—	1	—	—
149	—	1	—	—
150	—	—	—	—
151	—	—	—	—
152	—	—	—	—
153	—	—	—	—
Cases:	9	7	11	18
Averages:	135.2	143.0	143.4	136.7

CEPHALIC INDEX.

MEN, WOMEN, AND CHILDREN.

Index.	Maidu of Sacramento Valley.	Maidu of Foot-Hills.		Maidu of Mountains and Pit River.	Pomo.	Yuki.
		Dixon.	Chesnut.			
70[1]	—	—	—	—	—	—
71	—	—	—	—	—	—
72	—	—	—	—	—	1
73	—	2	2	—	1	3
74	—	—	—	—	—	6
75	—	—	3	—	—	6
76	—	—	2	—	3	10
77	—	3	1	1	5	8
78	—	4	3	—	1	3
79	—	3	5	—	2	2
80	—	2	4	5	2	3
81	2	5	—	4	4	1
82	2	—	—	2	1	1
83	1	3	2	2	2	3
84	—	—	—	—	—	—
85	—	1	—	1	3	1
86	—	—	—	—	2	—
87	—	—	—	—	2	—
88	—	—	—	—	—	—
89	—	—	—	—	—	—
90	—	—	—	1	—	—
91	—	—	—	1	—	—
92	—	—	—	—	—	—
93	—	—	—	1	—	—
	5	23	22	18	28	48
	82.3	79.1		83.3	81.0	77.6

---

[1] That is, from 70.0 to 70.9, etc.

AVERAGE MEASUREMENTS.

	Maidu of Sacramento Valley.	Maidu of Foot-Hills.	Maidu of Mountains and Pit River.	Pomo.	Yuki.
Stature, Men............	1607 (4)	1644 (25)	1687 (11)	1682 (6)	1590 (17)
" Women.........	—	*1533* (9)	*1573* (7)	*1569* (9)	*1488* (17)
Stretch of Arms, Men.....	1682 (4)	1712 (25)	1789 (11)	1775 (6)	1680 (18)
Height of Shoulder, Men..	1315 (4)	1352 (25)	1395 (11)	1390 (6)	1317 (17)
Length of Arm, Men.....	720 (4)	726 (25)	772 (11)	757 (6)	724 (17)
Height sitting, Men......	842 (4)	863 (22)	905 (11)	880 (6)	832 (17)
Width of Shoulders, Men..	360 (4)	376 (25)	395 (11)	383 (6)	367 (18)
Length of Head, Men.....	189.0 (5)	194.0 (29)	194.4 (11)	190.1 (8)	195.2 (23)
" " " Women.	—	*185.0* (9)	*182.7* (7)	*181.0* (11)	*184.6* (18)
Width of Head, Men.....	155.4 (5)	153.5 (29)	158.8 (11)	154.0 (8)	148.3 (23)
" " " Women..	—	*145.1* (9)	*156.0* (7)	*147.2* (11)	*143.8* (18)
" " Face, Men	143.8 (5)	145.7 (29)	150.1 (11)	148.8 (8)	146.6 (23)
" " Women...	—	*135.2* (9)	*143.0* (7)	*143.4* (11)	*136.7* (18)
Height of Face, Men[1]....	122 (4)	122.6 (26)	124.2 (11)	120.0 (6)	118.0 (18)
Cephalic Index, Whole Series................	82.3 (5)	79.1 (45)	83.3 (18)	81.0 (28)	77.6 (48)

These tables show clearly that the Yuki differ in type from all the neighboring tribes. They are short of stature, the average found being 159 cm. for men, and 149 cm. for women. Their heads are elongated, which is due to great narrowness of the head; the cephalic index is about 77.5. The face is small, being both narrow and low. This type seems to be also present among the Maidu of the Foot-Hill region, but farther to the north and east it disappears. It is much less frequent among the Pomo than among the Maidu of the Foot-Hill region. Towards the interior and among the Pomo a type prevails which is similar to that of the Indians of the plateaus of Nevada and Utah. Their stature reaches 168 cm. among men, and 156 cm. among women, while the cephalic index is about 83. The width of face has the characteristic high value of the eastern Indians, being, on the average, 149. Among the Pit River Indians excessively short heads are found. I am doubtful if they may not be in part due to flattening of the occiput, although they seem to arise rather from excessive width than from excessive shortness of the head.

It seems plausible that the type represented by the Yuki may be related to the very short and long-headed type of the islands of California, which, in its most pronounced form, was found on the most southern islands; while northward, towards Santa Barbara, its most striking characteristics become less marked. It would seem, that, if this relationship exists, the Yuki would resemble the ancient inhabitants of Santa Barbara.

---

[1] 4 mm. added to Mr. Chesnut's measurements.

The occurrence of this peculiar type among the other types of the Pacific coast is very remarkable. It is another instance of the irregularity of distribution of types along this coast, and analogous to the irregularities of distribution that are found along the coast farther to the north.[1]

The average number of children of women of forty years and over is 3.7, which is much less than the average number of children of Indians of other parts of the continent. Taken in connection with the high infant mortality, this indicates a rapid reduction in numbers of the population.

---

[1] See Twelfth Report on the North-Western Tribes of Canada (Report of the British Association for the Advancement of Science, 1898).

LIST OF MEASUREMENTS.

The following abbreviations have been used:

St.....Stature.
Str....Stretch of arms.
Sh....Height of shoulder (acromion).
A.....Length of arm (acromion to tip of second finger).
Hs....Height sitting.
Wsh...Width of shoulders between acromia.
Bha...Breadth of hand across knuckles.
Lfi....Length of second finger.
Lh....Length of head.
Bh....Width of head.
Wf....Width of face between zygomatic arches.
HfI....Distance from hair line to chin.
HfII..Distance from nasion to chin.
Hn....Height of nose.
Wn...Width of nose between alæ.
Le....Length of ear.
Vc....Vertical circumference of head, from tragus to tragus.
Hc....Horizontal circumference of head.
IStr... $\frac{Str}{St}$
IA.... $\frac{A}{St}$
IHs.... $\frac{Hs}{St}$
IWsh.. $\frac{Wsh}{St}$
CI..... $\frac{Bh}{Lh}$

MAIDU OF SACRAMENTO VALLEY.

Males.

Observer: R. B. Dixon.

1. Age 40, Mike Jefferson. — St 1640 Str 1670 Sh 1320 A 670 Hs 860 Wsh 370 Bha 90 Lfi 88 — Lh 195 Bh 158 Wf 142 HfI 180 HfII 130 Hn 55 Wn 40 Le 69 Vc 360 Hc 580 — *IStr* 101.8 *IA* 40.9 *IHs* 52.4 *IWsh* 22.6 — *CI* 81.0.

2. Age 45, Billy. — St 1590 Str 1680 Sh 1320 A 740 Hs 840 Wsh 360 Bha 83 Lfi 90 Lfa 440 — Lh 190 Bh 159 Wf 143 HfI 166 HfII 114 Hn 58 Wn 42 Le 66 Vc 385 Hc 560 — *IStr* 105.7 *IA* 46.6 *IHs* 52.8 *IWsh* 22.7 — *CI* 83.7.

3. Age 50, Polissy. — St 1600 Str 1650 Sh 1310 A 710 Hs 830 Wsh 345 Bha 85 Lfi 94 Lfa 440 — Lh 190 Bh 157 Wf 146 HfI 165 HfII 120 Hn 57 Wn 42 Le 66 Vc 370 Hc 560 — *IStr* 103.1 *IA* 44.4 *IHs* 51.9 *IWsh* 21.8 — *CI* 82.6.

4. Age 50, George Barber. — St 1600 Str 1730 Sh 1310 A 760 Hs 840 Wsh 360 Bha 89 Lfi 93 Lfa 465 — Lh 188 Bh 153 Wf 146 HfI 172 HfII 123 Hn 57 Wn 45 Le 67

Vc 375 Hc 550 — *IStr* 108.1 *IA* 47.5 *IHs* 52.5 *IWsh* 22.5 — *CI* 81.4.

Observer: V. K. Chesnut.

5. Age 70, Pete Virginia. — St 1573 Str 1665 Sh 1292 A 734 Hs 828 Wsh 332 — Lh 182 Bh 150 Wf 143 Hf 122 Hn 53 Wn 44 — *CI* 82.4.

MAIDU OF THE FOOT-HILL REGION.

Observer: R. B. Dixon.

I. *Males.*

6. Age 19, Louis Asbil.[1] — St 1650 Str 1730 Sh 1350 A 740 Hs 870 Wsh 385 Bha 85 Lfi 94 — Lh 186 Bh 147 Wf 138 HfI 184 HfII 119 Hn 50 Wn 41 Le 63 Vc 350 Hc 550 — *IStr* 104.9 *IA* 44.9 *IHs* 52.7 *IWsh* 23.2 — *CI* 79.0.

7. Age 30, Bob Brooks. — St 1760 Str 1800 Sh 1450 A 740 Hs 870 Wsh 370 Bha 81 Lfi 91 Lfa 470 — Lh 192 Bh 150 Wf 143 HfI 201 HfII 129 Hn 48 Wn 37 Le 63 Vc 355 Hc 550 — *IStr* 102.3 *IA* 42.0 *IHs* 49.4 *IWsh* 21.0 — *CI* 78.1.

8. Age 35, Ben Benjamin. — St 1580 Str 1640 Sh 1260 A 660 Hs 900 Wsh 380 Bha 86 Lfi 90 Lfa 480 — Lh 197 Bh 155 Wf 139 HfI 193 HfII 129 Hn 51 Wn 44 Le 62 — *IStr* 103.8 *IA* 41.8 *IHs* 57.0 *IWsh* 24.1 — *CI* 78.7.

9. Age 38, Jim Stevens. — St 1650 Str 1780 Sh 1360 A 730 Hs 890 Wsh 385 Bha 92 Lfi 96 — Lh 196 Bh 154 Wf 152 HfI 172 HfII 119 Hn 46 Wn 39 Le 63 — *IStr* 107.9 *IA* 44.2 *IHs* 53.9 *IWsh* 23.3 — *CI* 78.6.

10. Age 40, Ed. Currin. — St 1690 Str 1740 Sh 1380 A 710 Hs 920 Wsh 410 Bha 90 Lfi 90 Lfa 450 — Lh 200 Bh 166 Wf 156 HfI 199 HfII 132 Hn 50 Wn 42 Le 74 Vc 390 Hc 620 — *IStr* 103.0 *IA* 42.0 *IHs* 54.4 *IWsh* 24.3 — *CI* 83.0.

11. Age 40, Lawson Anderson. — St 1620 Str 1620 Sh 1310 A 700 Hs 850 Wsh 380 Bha 86 Lfi 87 — Lh 183 Bh 146 Wf 141 HfI 168 HfII 118 Hn 46 Wn 42 Le 65 Vc 350 Hc 550 — *IStr* 100.0 *IA* 43.2 *IHs* 52.5 *IWsh* 23.5 — *CI* 79.8.

12. Age 40–42, Henry Clay. — St 1690 Str 1800 Sh 1410 A 780 Hs 920 Wsh 420 Bha 93 Lfi 110 — Lh 205 Bh 167 Wf 155 HfI 184 HfII 126 Hn 53 Wn 45 Le 72 Vc 380 Hc 630 — *IStr* 106.5 *IA* 46.2 *IHs* 54.4 *IWsh* 24.9 — *CI* 81.5.

13. Age 45, George Asbil. — St 1570 Str 1690 Sh 1240 A 660 Hs 860 Wsh 385 Bha 84 Lfi 90 — Lh 192 Bh 149 Wf 137

---

[1] Father, Maidu of the Foot-Hill region; mother, Wintun.

HfI 166 HfII 119 Hn 49 Wn 43 Le 63 Vc 345 Hc 570 — *IStr* 107.7 *IA* 42.0 *IHs* 54.8 *IWsh* 24.5 — *CI* 77.6.

14. Age 45, Jim Mullen. — St 1620 Str 1660 Sh 1320 A 690 Hs 860 Wsh 370 Bha 92 — Lh 192 Bh 156 Wf 141 HfI 183 HfII 127 Hn 51 Wn 43 Le 62 Vc 375 Hc 570 — *IStr* 102.5 *IA* 42.6 *IHs* 53.1 *IWsh* 22.9 — *CI* 81.2.

15. Age 45, Walter Uptograth. — St 1640 Str 1790 Sh 1365 A 765 Hs 830 Wsh 390 Bha 87 Lfi 99 — Lh 199 Bh 146 Wf 153 HfI 179 HfII 125 Hn 50 Wn 47 Le 70 Vc 345 Hc 585 — *IStr* 109.1 *IA* 46.4 *IHs* 50.3 *IWsh* 23.6 — *CI* 73.4.

16. Age 45, Bill Logan. — St 1590 Str 1600 Sh 1320 A 650 Hs 850 Wsh 350 Bha 80 Lfi 84 Lfa 410 — Lh 190 Bh 154 Wf 147 HfI 169 HfII 121 Hn 47 Wn 45 Le 61 Vc 360 Hc 560 — *IStr* 100.6 *IA* 40.9 *IHs* 53.5 *IWsh* 22.0 — *CI* 81.1.

17. Age 55–60, Dan Wright. — St 1700 Str 1770 Sh 1400 A 760 Hs 910 Wsh 380 Bha 89 Lfi 102 — Lh 191 Bh 160 Wf 148 HfI 167 HfII 120 Hn 50 Wn 47 Le 68 Vc 360 Hc 580 — *IStr* 104.1 *IA* 44.7 *IHs* 53.5 *IWsh* 22.4 — *CI* 83.8.

18. Age 60, Jack Wright. — St 1490 Str 1620 Sh 1210 A 700 Hs 790 Wsh 350 Bha 78 Lh 184 Bh 143 Wf 136 HfI 166 HfII 115 Hn 50 Wn 41 Le 66 Vc 350 Hc 540 — *IStr* 108.7 *IA* 47.0 *IHs* 52.4 *IWsh* 23.5 — *CI* 77.7.

19. Age 60, Jack McLane. — St 1650 Str 1670 Sh 1350 A 720 Hs 880 Wsh 370 Bha 85 Lfi 87 — Lh 193 Bh 156 Wf 157 HfI 176 HfII 127 Hn 54 Wn 44 Le 77 — *IStr* 101.2 *IA* 43.6 *IHs* 53.3 *IWsh* 22.4 — *CI* 80.8.

20. Age 60, Dolby McLane. — St 1630 Str 1720 Sh 1360 A 720 Hs 820 Wsh 380 Bha 87 Lfi 90 Lfa 460 — Lh 202 Bh 163 Wf 150 HfI 173 HfII 119 Hn 49 Wn 47 Le 73 — *IStr* 105.5 *IA* 44.2 *IHs* 50.3 *IWsh* 23.3 — *CI* 80.7.

21. Age 60, Billy Williams. — St 1600 Str 1670 Sh 1350 A 710 Hs 830 Wsh 360 Bha 84 Lfa 440 — Lh 192 Bh 152 Wf 140 HfI 188 HfII 116 Hn 49 Wn 46 Le 70 — *IStr* 104.4 *IA* 44.4 *IHs* 51.9 *IWsh* 22.5 — *CI* 79.2.

22. Age 70, Bill Brooks. — St 1570 Str 1610 Sh 1300 A 690 Hs 840 Wsh 360 Bha 73 Lfi 85 Lfa 450 — Lh 190 Bh 158 Wf 145 HfI 181 HfII 124 Hn 53 Wn 41 Le 70 Vc 380 Hc 570 — *IStr* 102.6 *IA* 43.9 *IHs* 53.5 *IWsh* 22.9 — *CI* 83.2.

23. Age 75–80, Happy Jack. — St 1520 Str 1560 Sh 1230 A 640 Hs 78.5 Wsh 340 Bha 76 — Lh 187 [1] Bh 152 Wf 143 HfI 172 HfII 119 Hn 47 Wn 45 Le 71 Vc 365 Hc 540 — *IStr* 102.6 *IA* 42.1 *IHs* 51.7 *IWsh* 22.4 — *CI* 81.3.

---

[1] Flattened occiput.

II. *Females.*

24. Age 50, Kate Brooks. — St 1490 Str 1510 Sh 1220 A 670 Hs 800 Wsh 325 Bha 72 Lfi 71 Lfa 420 — Lh 173 Bh 147 Wf 135 HfI 161 HfII 110 Hn 44 Wn 35 Le 60 Vc 325 Hc 520 — *IStr* 101.4 *IA* 45.0 *IHs* 53.7 *IWsh* 21.8 — *CI* 85.0.

25. Age 30, Dolly Anderson. — St 1540 Str 1545 Sh 1270 A 660 Hs 850 Wsh 350 Bha 84 Lfi 80 — Lh 177 Bh 137 Wf 134 HfI 163 HfII 112 Hn 44 Wn 40 Le 62 Vc 350 Hc 560 — *IStr* 100.3 *IA* 42.9 *IHs* 55.2 *IWsh* 22.7 — *CI* 77.4.

26. Age 30, Susie Downs. — St 1560 Str 1530 Sh 1270 A 640 Hs 830 Wsh 340 Bha 80 Lfi 80 — Lh 188 Bh 153 Wf 140 HfI 171 HfII 117 Hn 50 Wn 38 Le 53 Vc 370 Hc 580 — *IStr* 98.1 *IA* 41.0 *IHs* 53.2 *IWsh* 21.8 — *CI* 81.4.

27. Age 35-40, Nancy Clay. — St 1560 Str 1600 Sh 1300 A 670 Hs 800 Wsh 350 Bha 74 Lfi 89 — Lh 191 Bh 141 Wf 135 HfI 165 HfII 116 Hn 45 Wn 41 Le 63 — *IStr* 102.6 *IA* 42.9 *IHs* 51.3 *IWsh* 22.4 — *CI* 73.8.

28. Age 60, Alice Mullen. — St 1580 Str 1550 Sh 1360 A 730 Hs 850 Wsh 320 Bha 76 Lfi 85 — Lh 188 Bh 148 Wf 133 HfI 163 HfII 113 Hn 47 Wn 40 Le 62 Vc 355 Hc 570 — *IStr* 98.1 *IA* 46.2 *IHs* 52.5 *IWsh* 20.3 — *CI* 78.7.

Observer: V. K. Chesnut.

I. *Males.*

29. Age 8, Wallace Lincoln. — St 1197 Str 1185 Sh 974 A 516 Hs 665 Wsh 262 — Lh 172 Bh 143 Wf 124 Hf 91 Hn 40 Wn 32 — *CI* 83.1.

6a. Age 10, Louis Asbil. — St 1389 Str 1419 Sh 1129 A 614 Hs 730 Wsh 289 — Lh 174 Bh 146 Wf 125 Hf 111 Hn 42 Wn 37 — *CI* 79.0.

30. Age 17, John Webster. — St 1704 Str 1743 Sh 1455 A 750 Hs 900 Wsh 185 — Lh 193 Bh 152 Wf 150 Hf 118 Hn 50 Wn 40 — *CI* 79.7.

31. Age 21, Henry Downs. — St 1795 Str 1859 Sh 1481 A 808 Wsh 400 — Lh 198 Bh 151 Wf 142 Hf 121 Hn 45 Wn 37 — *CI* 76.2.

32. Age 24, Pete Corbett.— Lh 192 Bh 160 Wf 149 Hf 133 Hn 49 Wn 40 — *CI* 83.3.

33. Age 26, Charley Wright. — St 1708 Str 1790 Sh 1424 A 777 Hs 846 Wsh 372 — Lh 187 Bh 151 Wf 137 Hf 111 Hn 52 Wn 36 — *CI* 80.8.

34. Age 30, David Lincoln. — St 1614 Str 1683 Sh 1304 A 710

Hs 882 Wsh 357 — Lh 206 Bh 155 Wf 144 Hf 123 Hn 55 Wn 43 — *CI* 75.2.

35. Age 32, John Brown. — St 1614 Str 1682 Sh 1357 A 724 Hs 818 Wsh 364 — Lh 196 Bh 144 Wf 145 Hf 115 Hn 50 Wn 42 — *CI* 73.5.

36. Age 34, Dixie Edsal. — St 1654 Str 1710 Sh 1375 A 755 Hs 827 Wsh 372 — Lh 196 Bh 155 Wf 146 Hf 121 Hn 52 Wn 40 — *CI* 79.1.

37. Age 34, Tom Perrington. — St 1628 Str 1703 Sh 1352 A 723 Hs 870 Wsh 399 — Lh 198 Bh 149 Wf 146 Hf 119 Hn 49 Wn 43 — *CI* 75.3.

38. Age 38, Dan Webster. — St 1693 Str 1803 Sh 1377 A 784 Hs 883 Wsh 392 — Lh 199 Bh 156 Wf 148 Hf 122 Hn 51 Wn 40 — *CI* 78.4.

39. Age 52, Doc. Gibson. — St 1621 Str 1661 Sh 1356 A 713 Wsh 350 — Lh 193 Bh 154 Wf 149 Hf 113 Hn 50 Wn 45 — *CI* 79.8.

40. Age 70, John Whiskers. — St 1563 Str 1596 Sh 1296 A 726 Hs 848 Wsh 335 — Lh 192 Bh 154 Wf 147 Hf 113 Hn 50 Wn 53 — *CI* 80.2.

41. Age —, Tony Laycock. — St 1615 Str 1604 Sh 1347 A 738 Wsh 355 — Lh 197 Bh 150 Wf 141 Hf 109 Hn 50 Wn 47 — *CI* 76.1.

II. *Females.*

42. Age 8, Roxy Webster.[1] — St 1277 Str 1300 Sh 1019 A 555 Hs 684 Wsh 271 — Lh 178 Bh 140 Wf 124 Hf 92 Hn 38 Wn 33 — *CI* 78.6.

43. Age 9, Bertie Anderson. — St 1310 Str 1283 Sh 1057 A 558 Hs 712 Wsh 260 — Lh 171 Bh 125 Wf 121 Hf 104 Hn 41 Wn 33 — *CI* 73.1.

44. Age 10, Hattie Webster.[1] — St 1299 Str 1309 Sh 1043 A 552 Hs 695 Wsh 281 — Lh 172 Bh 139 Wf 122 Hf 98 Hn 35 Wn 32 — *CI* 80.8.

45. Age 13, Ollie Stranget. — St 1507 Str 1555 Sh 1259 A 684 Hs 768 Wsh 312 — Lh 177 Bh 142 Wf 131 Hf 109 Hn 43 Wn 35 — *CI* 80.2.

46. Age 14, Clara Anderson. — St 1577 Str 1560 Sh 1288 A 671 Hs 852 Wsh 325 — Lh 185 Bh 140 Wf 135 Hf 110 Hn 46 Wn 37 — *CI* 75.7.

47. Age 20, Sarah Willsey. — St 1524 Str 1558 Sh 1260 A 651

---

[1] Father, Maidu of Foot-Hill region; mother, Pit River.

Hs 782 Wsh 346 — Lh 184 Bh 146 Wf 132 Hf 103 Hn 41 Wn 36 — *CI* 79.3.

48. Age 24, Mary Anderson.[1] — St 1540 Str 1556 Sh 1250 A 680 Hs 824 Wsh 335 — Lh 192 Bh 152 Wf 135 Hf 108 Hn 42 Wn 38 — *CI* 79.2.

49. Age 40, Sally Wright. — St 1500 Str 1542 Sh 1230 A 631 Wsh 330 — Lh 188 Bh 147 Wf 138 Hf 112 Hn 45 Wn 37 — *CI* 78.2.

50. Age 60, Nancy Laycock. — St 1494 Str 1532 Sh 1231 A 642 Hs 804 Wsh 333 — Lh 185 Bh 144 Wf 135 Hf 120 Hn 52 Wn 40 — *CI* 77.8.

MAIDU OF MOUNTAINS.

Observer: R. B. Dixon.

I. *Males.*

51. Age 20, Frank Thomas. — St 1670 Str 1730 Sh 1350 A 730 Hs 950 Wsh 415 Bha 86 Lfi 88 Lfa 450 — Lh 190 Bh 153 Wf 146 HfI 178 HfII 127 Hn 50 Wn 38 Le 63 Vc 360 Hc 560 — *IStr* 103.6 *IA* 43.7 *IHs* 56.9 *IWsh* 24.9 — *CI* 80.5.

52. Age 20, Johnny Pai yute.[2] — St 1720 Str 1820 Sh 1430 A 760 Hs 905 Wsh 350 Bha 85 Lfi 97 — Lh 194 Bh 157 Wf 148 HfI 183 HfII 123 Hn 49 Wn 39 Le 62 Vc 370 Hc 570 — *IStr* 105.8 *IA* 44.2 *IHs* 52.6 *IWsh* 20.4 — *CI* 81.3.

53. Age 20, George Washoe.[3] — St 1580 Str 1730 Sh 1300 A 750 Hs 880 Wsh 380 Bha 82 Lfi 90 Lfa 450 — Lh 195 Bh 156 Wf 149 HfI 172 HfII 120 Hn 47 Wn 41 Le 60 Vc 360 Hc 570 — *IStr* 109.5 *IA* 47.5 *IHs* 55.7 *IWsh* 24.1 — *CI* 80.0.

54. Age 20, Johnny Bob. — St 1700 Str 1800 Sh 1390 A 780 Hs 910 Wsh 390 Bha 88 Lfi 95 Lfa 470 — Lh 194 Bh 158 Wf 150 HfI 173 HfII 125 Hn 53 Wn 45 Le 65 Vc 370 Hc 585 — *IStr* 105.9 *IA* 45.9 *IHs* 53.5 *IWsh* 22.9 — *CI* 81.4.

55. Age 27, Mosy Higgins. — St 1700 Str 1790 Sh 1400 A 750 Hs 880 Wsh 400 Bha 85 Lfi 91 Lfa 460 — Lh 197 Bh 164 Wf 152 HfI 176 HfII 118 Hn 48 Wn 41 Le 67 Vc 385 Hc 580 — *IStr* 105.3 *IA* 44.1 *IHs* 51.8 *IWsh* 23.5 — *CI* 83.2.

56. Age 30, Pete Thomas. — St 1680 Str 1780 Sh 1400 A 770 Hs 910 Wsh 410 Bha 87 Lfi 85 Lfa 460 — Lh 192 Bh 158 Wf 147 HfI 175 HfII 118 Hn 44 Wn 39 Le 69 Vc 370 Hc 575 — *IStr* 106.0 *IA* 45.8 *IHs* 54.2 *IWsh* 24.4 — *CI* 82.3.

---

[1] Father, Sacramento Valley; mother, Foot-Hill region.

[2] Father, half Washoe.

[3] Father, half Washoe, half Maidu of Mountain region; mother, Pit River.

57. Age 35, John Roy. — St 1640 Str 1770 Sh 1370 A 795 Hs 890 Wsh 360 Bha 90 Lfi 90 Lfa 460 — Lh 192 Bh 159 Wf 153 HfI 177 HfII 125 Hn 48 Wn 40 Le 67 Vc 370 Hc 575 — *IStr* 107.9 *IA* 48.2 *IHs* 53.9 *IWsh* 21.8 — *CI* 82.8.

58. Age 40, Sam Roy. — St 1650 Str 1760 Sh 1350 A 750 Hs 870 Wsh 410 Bha 90 Lfi 93 Lfa 460 — Lh 189.5 Bh 158 Wf 150 HfI 162 HfII 121 Hn 45 Wn 43 Le 64 Vc 360 Hc 560 — *IStr* 106.7 *IA* 45.5 *IHs* 52.7 *IWsh* 24.9 — *CI* 83.2.

II. *Females.*

59. Age 30, Mary Roy. — St 1610 Str 1630 Sh 1320 A 670 Hs 850 Wsh 350 Bha 82 Lfi 87 Lfa 430 — Lh 187 Bh 150 Wf 137 HfI 168 HfII 119 Hn 46 Wn 37 Le 64 Vc 365 Hc 575 — *IStr* 101.3 *IA* 41.6 *IHs* 52.8 *IWsh* 21.8 — *CI* 80.2.

60. Age 50, Lucy. — St 1560 Str 1640 Sh 1280 A 800 Hs 780 Wsh 295 Bha 75 Lfi 90 — Lh 191 Bh 148 Wf 142 HfI 154 HfII 107 Hn 46 Wn 42 Le 68 — *IStr* 105.1 *IHs* 50.0 *IWsh* 29.0 — *CI* 77.5.

HAT CREEK AND PIT RIVER.

Observer: R. B. Dixon.

I. *Males.*

61. Age 22, Ike Tom.[1] — St 1790 Str 1910 Sh 1510 A 870 Hs 950 Wsh 415 Bha 91 Lfi 99 — Lh 193 Bh 157 Wf 151 HfI 182 HfII 131 Hn 53 Wn 38 Le 72 Vc 370 Hc 570 — *IStr* 106.7 *IA* 48.6 *IHs* 53.1 *IWsh* 23.2 — *CI* 81.3.

62. Age 30, Alec Tom.[1] — St 1780 Str 1880 Sh 1500 A 800 Hs 930 Wsh 425 Bha 90 Lfi 97 Lfa 490 — Lh 199 Bh 161 Wf 154 HfI 189 HfII 130 Hn 53 Wn 40 Le 70 Vc 385 Hc 575 — *IStr* 105.6 *IA* 44.9 *IHs* 52.2 *IWsh* 23.9 — *CI* 80.9.

63. Age 50, Capt. Charles.[2] — St 1650 Str 1710 Sh 1380 A 740 Hs 890 Wsh 390 Bha 88 Lfi 93 — Lh 201 Bh 161 Wf 152 HfI 163 HfII 128 Hn 52 Wn 46 Le 73 Vc 380 Hc 585 — *IStr* 103.6 *IA* 44.9 *IHs* 53.9 *IWsh* 23.6 — *CI* 80.1.

II. *Females.*

64. Age 25, Maggie.[1] — St 1590 Str 1640 Sh 1310 A 720 Hs 830 Wsh 380 Bha 75 Lfi 83 — Lh 185 Bh 150 Wf 140 HfI 162 HfII 115 Hn 43 Wn 32 Le 60 — *IStr* 103.2 *IA* 45.3 *IHs* 52.2 *IWsh* 23.9 — *CI* 81.1.

---

[1] Father, Hat Creek; mother, Maidu of Mountains.
[2] Father, Maidu of Mountains; mother, Hat Creek.
[3] Father, Maidu of Mountains; mother, Pit River.

65. Age 25, Lucy.[1] — St 1580 Str 1630 Sh 1320 A 730 Hs 880 Wsh 380 Bha 85 Lfi 85 — Lh 178 Bh 161 Wf 143 HfI 180 HfII 118 Hn 50 Wn 34 Le 62 Vc 380 Hc 590 — *IStr* 103.2 *IA* 46.2 *IHs* 55.7 *IWsh* 24.1 — *CI* 90.5.

66. Age 35, Kate Charlie.[1] — St 1590 Str 1580 Sh 1300 A 700 Hs 860 Wsh 370 Bha 82 Lfi 90 Lfa 420 — Lh 188 Bh 160 Wf 149 HfI 176 HfII 120 Hn 50 Wn 36 Le 65 Vc 405 Hc 605 — *IStr* 99.4 *IA* 44.0 *IHs* 54.1 *IWsh* 23.3 — *CI* 85.1.

67. Age 45, Annie Thomson.[2] — St 1540 Str 1550 Sh 1280 A 700 Hs 800 Wsh 340 Bha 84 Lfi 87 — Lh 172 Bh 157 Wf 143 HfI 154 HfII 110 Hn 46.5 Wn 38 Le 67 — *IStr* 100.7 *IA* 45.5 *IHs* 51.9 *IWsh* 22.1 — *CI* 91.3.

68. Age 50, Mary.[3] — St 1540 Str 1550 Sh 1260 A 710 Hs 850 Wsh 345 Bha 80 Lfi 80 — Lh 178 Bh 167 Wf 148 HfI 178 HfII 116 Hn 50 Wn 35.5 Le 68 Vc 380 Hc 575 — *IStr* 100.7 *IA* 46.1 *IHs* 55.2 *IWsh* 22.4 — *CI* 93.8.

PIUTE.

Observer: R. B. Dixon.

Male.

69. Age 25, Dick. — St 1560 Str 1720 Sh 1350 A 740 Hs 790 Wsh 405 Bha 83 Lfi 90 Lfa 450 — Lh 188 Bh 155 Wf 149 HfI 182 HfII 113 Hn 45 Wn 40 Le 65 Vc 375 Hc 565 — *IStr* 110.3 *IA* 47.4 *IHs* 50.7 *IWsh* 26.0 — *CI* 82.4.

POMO.

Observer: R. B. Dixon.

Male.

70. Age 35, Charles Goodwin. — St 1800 Str 1830 Sh 1500 A 780 Hs 920 Wsh 400 Bha 90 Lfi 98 — Lh 191 Bh 157 Wf 140 HfI 180 HfII 126 Hn 50 Wn 39 Le 64 Vc 350 Hc 560 — *IStr* 101.7 *IA* 43.3 *IHs* 51.1 *IWsh* 22.2 — *CI* 82.2.

POMO.

Observer: V. K. Chesnut.

I. *Males.*

71. Age 7, Wilsey McLean.[4] — St 1161 Str 1196 Sh 905 A 503 Hs 611 Wsh 237 — Lh 171 Bh 150 Wf 120 Hf 99 Hn 39 Wn 32 — *CI* 87.7.

---

[1] Father, Maidu of Mountains; mother, Hat Creek.
[2] Pit River.
[3] Hat Creek.
[4] Father, Maidu of Foot-Hills; mother, Pomo.

72. Age 7, Leland Fullider. — St 1283 Str 1323 Sh 1047 A 569 Hs 703 Wsh 294 — Lh 180 Bh 140 Wf 127 Hf 100 Hn 35 Wn 36 — *CI* 77.8.

73. Age 15, Lee Jackson. — St 1492 Str 1532 Sh 1234 A 704 Hs 800 Wsh 310 — Lh 178 Bh 149 Wf 131 Hf 104 Hn 40 Wn 40 — *CI* 83.7.

74. Age 15, Isaac Williams. — St 1543 Str 1605 Sh 1298 A 732 Hs 760 Wsh 306 — Lh 188 Bh 145 Wf 134 Hf 110 Hn 42 Wn 41 — *CI* 77.1.

75. Age 15, Henry Greaves. — St 1716 Str 1721 Sh 1397 A 771 Hs 876 Wsh 325 — Lh 197 Bh 160 Wf 146 Hf 114 Hn 47 Wn 42 — *CI* 81.2.

76. Age 27, Jim Brown. — St 1648 Str 1741 Sh 1373 A 740 Hs 866 Wsh 380 — Lh 191 Bh 153 Wf 142 Hf 107 Hn 46 Wn 42 — *CI* 80.1.

77. Age 30, John Reilly. — St 1610 Str 1815 Sh 1357 A 758 Hs 805 Wsh 377 — Lh 186 Bh 151 Wf 149 Hf 111 Hn 47 Wn 47 — *CI* 81.2.

78. Age 40, James Jimeson. — St 1649 Str 1760 Sh 1337 A 744 Hs 880 Wsh 387 — Lh 187 Bh 163 Wf 151 Hf 123 Hn 55 Wn 42 — *CI* 87.2.

79. Age 40, Jack Coates. — St 1686 Str 1736 Sh 1387 A 775 Hs 860 Wsh 385 — Lh 196 Bh 167 Wf 155 Hf 113 Hn 50 Wn 47 — *CI* 85.2.

80. Age 50, Thomas Wright. — St 1688 Str 1768 Sh 1382 A 751 Hs 895 Wsh 374 — Lh 200 Bh 146 Wf 152 Hf 119 Hn 51 Wn 52 — *CI* 73.0.

81. Age 65, Ben Sawyer. — St 1606 Str 1744 Sh 1354 A 746 Hs 775 Wsh 360 — Lh 187 Bh 150 Wf 151 Hf 100 Hn 39 Wn 49 — *CI* 80.2.

82. Age 66, Wm. Potter. — St 1579 Str 1672 Sh 1297 A 755 Hs 828 Wsh 362 — Lh 182 Bh 145 Wf 149 Hf 108 Hn 50 Wn 44 — *CI* 79.7.

II. *Females.*

83. Age 18, Josephine Hughes. — St 1499 Str 1560 Sh 1234 A 689 Hs 817 Wsh 330 — Lh 176 Bh 146 Wf 133 Hf 108 Hn 46 Wn 35 — *CI* 83.0.

84. Age —, Annie Fullider. — Lh 174 Bh 151 Wf 142 Hf 109 Hn 50 Wn 37 — *CI* 86.8.

85. Age 10, Mabel Jimeson.[1] — St 1415 Str 1447 Sh 1164 A 629 Hs 727 Wsh 293 — Lh 171 Bh 139 Wf 126 Hf 94 Hn 44 Wn 32 — *CI* 81.3.

86. Age 12, Ada Bell. — St 1382 Str 1417 Sh 1120 A 616 Hs 700 Wsh 284 — Lh 180 Bh 142 Wf 126 Hf 99 Hn 37 Wn 33 — *CI* 78.9.

87. Age 14, Annie Fullider. — St 1542 Str 1570 Sh 1254 A 661 Hs 809 Wsh 360 — Lh 186 Bh 144 Wf 141 Hf 106 Hn 42 Wn 37 — *CI* 77.4.

88. Age 16, Martha Fullider. — St 1552 Str 1626 Sh 1262 A 689 Hs 813 Wsh 342 — Lh 186 Bh 144 Wf 137 Hf 106 Hn 43 Wn 36 — *CI* 77.4.

89. Age 19, Cecilia Crabtree. — St 1582 Str 1666 Sh 1318 A 704 Hs 829 Wsh 366 — Lh 186 Bh 148 Wf 137 Hf 104 Hn 39 Wn 38 — *CI* 79.6.

90. Age 25, Molly Clay. — St 1609 Str 1652 Sh 1322 A 698 Hs 834 Wsh 365 — Lh 178 Bh 152 Wf 138 Hf 121 Hn 48 Wn 38 — *CI* 85.4.

91. Age 35, Jean Waybolds. — St 1530 Str 1599 Sh 1273 A 671 Wsh 342 — Lh 177 Bh 137 Wf 134 Hf 110 Hn 45 Wn 42 — *CI* 77.4.

92. Age 38, Emily Seega. — St 1647 Str 1704 Sh 1355 A 718 Hs 864 Wsh 390 — Lh 186 Bh 161 Wf 147 Hf 117 Hn 46 Wn 37 — *CI* 86.5.

93. Age 45, Nancy Clay. — St 1527 Str 1548 Sh 1255 A 662 Hs 817 Wsh 320 — Lh 187 Bh 143 Wf 134 Hf 115 Hn 41 Wn 40 — *CI* 76.5.

94. Age 45, Mary Fullider. — St 1556 Str 1598 Sh 1314 A 702 Hs 833 Wsh 345 — Lh 185 Bh 142 Wf 140 Hf 112 Hn 45 Wn 36 — *CI* 76.8.

95. Age 50, Mary Coates. — St 1547 Str 1545 Sh 1286 A 677 Hs 849 Wsh 356 — Lh 174 Bh 149 Wf 143 Hf 98 Hn 44 Wn 41 — *CI* 85.6.

96. Age 75, Lizzy Sawyer. — St. 1447 Str 1506 Sh 1213 A 645 Hs 712 Wsh 303 — Lh 190 Bh 145 Wf 137 Hf 107 Hn 44 Wn 41 — *CI* 76.3.

97. Age —, Lucilia Crabtree. — St 1592 Str 1635 Sh 1324 A 696 Wsh 326 — Lh 179 Bh 145 Wf 136 Hf 100 Hn 40 Wn 39 — *CI* 81.0.

---

[1] Father, Pomo; mother, Yuki.

Yuki and Pomo Mixed.

Observer: V. K. Chesnut.

I. *Male.*

98. Age 16, James Woods.[1] — St 1645 Str 1735 Sh 1376 A 733 Hs 862 Wsh 322 — Lh 181 Bh 152 Wf 138 Hf 111 Hn 52 Wn 41 — *CI* 78.5.

II. *Female.*

99. Age 38, Jennie Frank.[1] — St 1479 Str 1544 Sh 1270 A 729 Hs 793 Wsh 349 — Lh 169 Bh 144 Wf 140 Hf 102 Hn 40 Wn 38 — *CI* 85.2.

Yuki.

Observer: R. B. Dixon.

Male.

100. Age 33, Charles Dorman. — St 1750 Str 1870 Sh 1440 A 790 Hs 910 Wsh 380 Bha 96 Lfi 109 — Lh 199 Bh 154 Wf 146 HfI 190 HfII 122 Hn 51 Wn 40 Le 66 Vc 350 Hc 590 — *IStr* 106.9 *IA* 45.1 *IHs* 52.0 *IWsh* 21.7 — *CI* 77.4.

Observer: V. K. Chesnut.

I. *Males.*

101. Age 7, Bill Garfield. — St 1300 Str 1321 Sh 1020 A 569 Hs 705 Wsh 295 — Lh 185 Bh 143 Wf 129 Hf 100 Hn 37 Wn 37 — *CI* 77.3.

102. Age 13, Fred Corney. — St 1523 Str 1548 Sh 1267 A 663 Hs 800 Wsh 353 — Lh 182 Bh 152 Wf 135 Hf 108 Hn 42 Wn 38 — *CI* 83.5.

103. Age 18, John Duncon. — St 1667 Str 1743 Sh 1361 Hs 856 Wsh 368 — Lh 192 Bh 149 Wf 146 Hf 121 Hn 51 Wn 39 — *CI* 77.6.

104. Age 18, Ralph Henley. — St 1600 Str 1637 Sh 1321 A 684 Wsh 371 — Lh 188 Bh 157 Wf 146 Hf 110 Hn 47 Wn 42 — *CI* 83.5.

105. Age 21, Alfred Brown. — Str 1884 Wsh 371 — Lh 202 Bh 155 Wf 144 Hf 119 Hn 51 Wn 40 — *CI* 76.7.

106. Age 30, Chas. Simonds. — St 1720 Str 1763 Sh 1428 A 757 Hs 897 Wsh 380 — Lh 200 Bh 154 Wf 150 Hf 115 Hn 46 Wn 40 — *CI* 77.0.

---

[1] Father, Yuki; mother, Pomo.

107. Age 30, John Lawly. — St 1622 Str 1694 Sh 1341 A 708 Hs 850 Wsh 376 — Lh 190 Bh 153 Wf 144 Hf 119 Hn 52 Wn 41 — *CI* 80.6.

108. Age 45, John Scott. — St 1607 Str 1651 Sh 1338 A 727 Hs 833 Wsh 377 — Lh 201 Bh 149 Wf 149 Hf 113 Hn 45 Wn 45 — *CI* 74.1.

109. Age 48, Dick Henley. — St 1553 Str 1630 Sh 1271 A 673 Hs 836 Wsh 385 — Lh 197 Bh 150 Wf 147 Hf 112 Hn 48 Wn 41 — *CI* 76.1.

110. Age 50, Long Frank. — St 1652 Str 1737 Sh 1385 A 770 Hs 867 Wsh 382 — Lh 196 Bh 145 Wf 146 Hf 114 Hn 51 Wn 40 — *CI* 74.0.

111. Age 50, Geo. Henley. — St 1568 Str 1623 Sh 1283 A 714 Hs 824 Wsh 351 — Lh 185 Bh 140 Wf 140 Hf 121 Hn 53 Wn 41 — *CI* 75.7.

112. Age 50, Dutchman. — St 1503 Str 1579 Sh 1251 A 699 Hs 798 Wsh 357 — Lh 194 Bh 148 Wf 144 Hf 110 Hn 43 Wn 45 — *CI* 76.3.

113. Age 50, James Woods. — St 1545 Str 1625 Sh 1304 A 699 Hs 809 Wsh 360 — Lh 193 Bh 150 Wf 145 Hf 119 Hn 51 Wn 45 — *CI* 77.7.

114. Age 52, Mike Hunter. — St 1567 Str 1654 Sh 1284 A 708 Hs 829 Wsh 377 — Lh 200 Bh 149 Wf 149 Hf 119 Hn 51 Wn 42 — *CI* 74.5.

115. Age 52, Jeff. Davis. — St 1613 Str 1708 Sh 1344 A 748 Hs 860 Wsh 373 — Lh 200 Bh 157 Wf 150 Hf 111 Hn 47 Wn 44 — *CI* 78.5.

116. Age 55, Ukie Ben. — St 1525 Str 1622 Sh 1283 A 706 Hs 790 Wsh 351 — Lh 193 Bh 148 Wf 143 Hf 118 Hn 56 Wn 44 — *CI* 76.7.

117. Age 57, Sam. Green. — St 1625 Str 1718 Sh 1338 A 756 Hs 838 Wsh 379 — Lh 207 Bh 151 Wf 146 Hf 110 Hn 52 Wn 42 — *CI* 73.0.

118. Age 60, Nick Douglass. — St 1522 Str 1618 Sh 1285 A 721 Hs 797 Wsh 347 — Lh 191 Bh 150 Wf 150 Hf 106 Hn 47 Wn 44 — *CI* 78.5.

119. Age 60, Nomelly. — St 1533 Str 1615 Sh 1245 A 688 Hs 815 Wsh 358 — Lh 196 Bh 148 Wf 148 Hf 118 Hn 51 Wn 44 — *CI* 75.5.

120. Age 60, Linya. — St 1588 Str 1668 Sh 1300 A 700 Hs 798 Wsh 363 — Lh 191 Bh 144 Wf 142 Hf 104 Hn 46 Wn 44 — *CI* 75.4.

121. Age 60, Old Billy. — St 1528 Str 1593 Sh 1293 A 743 Hs 787 Wsh 331 — Lh 192 Bh 145 Wf 145 Hf 111 Hn 46 Wn 44 — *CI* 75.5.

122. Age 65, "Oscar." — St 1527 Str 1653 Sh 1283 A 746 Hs 794 Wsh 358 — Lh 190 Bh 142 Wf 148 Hf 115 Hn 55 Wn 39 — *CI* 74.8.

123. Age 65, Major Jingle. — St 1605 Str 1677 Sh 1287 A 726 Hs 783 Wsh 341 — Lh 184 Bh 137 Wf 149 Hf 108 Hn 48 Wn 43 — *CI* 74.4.

124. Age 65, Liny Fenton. — St 1550 Str 1609 Sh 1320 A 687 Wsh 355 — Lh 192 Bh 143 Wf 147 Hf 107 Hn 42 Wn 50 — *CI* 74.5.

125. Age 67, Ute. — St 1683 Str 1728 Sh 1424 A 741 Hs 896 Wsh 372 — Lh 203 Bh 148 Wf 146 Hf 119 Hn 53 Wn 44 — *CI* 73.0.

126. Age 75, Jim Short. — St 1599 Str 1670 Sh 1344 A 712 Hs 843 Wsh 397 — Lh 190 Bh 151 Wf 154 Hf 116 Hn 48 Wn 44 — *CI* 79.6.

II. *Females.*

127. Age 9, Abbie Davis. — St 1304 Str 1360 Sh 1065 A 578 Hs 660 Wsh 296 — Lh 175 Bh 145 Wf 125 Hf 98 Hn 38 Wn 32 — *CI* 82.9.

128. Age 13, Minnie Joe. — St 1335 Str 1400 Sh 1070 A 575 Hs 671 Wsh 283 — Lh 180 Bh 137 Wf 124 Hf 105 Hn 42 Wn 36 — *CI* 76.1.

129. Age 15, Minnie Scott. — St 1516 Str 1544 Sh 1250 A 649 Hs 800 Wsh 335 — Lh 191 Bh 147 Wf 140 Hf 109 Hn 45 Wn 38 — *CI* 77.0.

130. Age 17, Mary Anderson. — St 1516 Str 1563 Sh 1240 A 688 Wsh 322 — Lh 184 Bh 141 Wf 130 Hf 112 Hn 46 Wn 37 — *CI* 76.6.

131. Age 18, Minnie Jackson. — St 1472 Str 1552 Sh 1209 A 663 Hs 776 Wsh 354 — Lh 184 Bh 144 Wf 134 Hf 102 Hn 42 Wn 37 — *CI* 78.3.

132. Age 18, Annie Anderson. — St 1538 Str 1575 Sh 1265 A 683 Hs 827 Wsh 335 — Lh 179 Bh 137 Wf 130 Hf 104 Hn 44 Wn 36 — *CI* 76.5.

133. Age 19, Cecilia Johns. — St 1556 Str 1577 Sh 1284 A 682 Hs 816 Wsh 355 — Lh 195 Bh 150 Wf 141 Hf 105 Hn 40 Wn 39 — *CI* 76.9.

134. Age 25, Ella Wood — St 1390 Str 1427 Sh 1154 A 598 Hs

750 Wsh 315 — Lh 178 Bh 137 Wf 130 Hf 105 Hn 42 Wn 33 — *CI* 77.0.

135. Age 25, Annie Lou. — St 1442 Str 1516 Sh 1215 A 674 Wsh 307 — Lh 182 Bh 145 Wf 136 Hf 101 Hn 37 Wn 34 — *CI* 79.7.

136. Age 30, Lizzie Henley. — St 1488 Str 1544 Sh 1230 A 650 Hs 786 Wsh 339 — Lh 181 Bh 145 Wf 134 Hf 105 Hn 44 Wn 40 — *CI* 80.1.

137. Age 37, Mary Davis. — St 1497 Str 1523 Sh 1274 A 674 Hs 797 Wsh 338 — Lh 180 Bh 140 Wf 137 Hf 105 Hn 46 Wn 36 — *CI* 77.8.

138. Age 38, Susie Jimeson. — St 1534 Str 1618 Sh 1283 A 675 Wsh 354 — Lh 176 Bh 147 Wf 141 Hf 109 Hn 45 Wn 38 — *CI* 83.5.

139. Age 40, Pauline Stone. — St 1523 Str 1562 Sh 1262 A 664 Hs 808 Wsh 351 — Lh 190 Bh 144 Wf 138 Hf 111 Hn 47 Wn 38 — *CI* 75.8.

140. Age 40, Julia Wood. — St 1437 Str 1469 Sh 1212 A 625 Hs 782 Wsh 334 — Lh 185 Bh 136 Wf 134 Hf 105 Hn 42 Wn 36 — *CI* 73.5.

141. Age 40, Lizzie Scott. — St 1539 Str 1584 Sh 1273 A 680 Hs 817 Wsh 340 — Lh 185 Bh 148 Wf 144 Hf 119 Hn 45 Wn 40 — *CI* 80.0.

142. Age 40, Lizzie. — St 1434 Str 1482 Sh 1202 A 640 Hs 754 Wsh 322 — Lh 194 Bh 147 Wf 145 Hf 101 Hn 40 Wn 41 — *CI* 75.8.

143. Age 45, Sally. — St 1486 Str 1489 Sh 1240 A 633 Hs 780 Wsh 323 — Lh 185 Bh 141 Wf 137 Hf 101 Hn 42 Wn 37 — *CI* 76.2.

144. Age 50, Maria Wright. — St 1490 Str 1538 Sh 1254 A 660 Wsh 339 — Lh 186 Bh 158 Wf 141 Hf 117 Hn 43 Wn 40 — *CI* 85.0.

145. Age 55, Jennie Lowen. — St 1457 Str 1488 Sh 1212 A 638 Hs 742 Wsh 291 — Lh 187 Bh 143 Wf 135 Hf 102 Hn 43 Wn 35 — *CI* 76.5.

146. Age 60, Nellie Frank. — St 1480 Str 1490 Sh 1230 A 658 Hs 796 Wsh 309 — Lh 191 Bh 138 Wf 136 Hf 109 Hn 46 Wn 41 — *CI* 72.2.

147. Age 70, Jeanie Douglass. — St 1475 Str 1516 Sh 1210 A 614 Hs 813 Wsh 330 — Lh 182 Bh 148 Wf 136 Hf 91 Hn 38 Wn 40 — *CI* 81.3.

WINTUN.

Observer: V. K. Chesnut.

Females.

148. Age 32, Lizzie Done. — St 1546 Str 1614 Sh 1279 A 650 Hs 810 Wsh 314 — Lh 185 Bh 152 Wf 134 Hf 109 Hn 46 Wn 37 — *CI* 82.2.

149. Age 40, Fanny Pollard. — St 1508 Str 1630 Sh 1269 A 692 Hs 850 Wsh 336 — Lh 188 Bh 147 Wf 145 Hf 111 Hn 43 Wn 41 — *CI* 78.2.

YOKUT.

Observer: V. K. Chesnut.

Male.

150. Age 35, Jim Henley. — St 1643 Str 1717 Sh 1362 A 726 Hs 865 Wsh 371 — Lh 190 Bh 157 Wf 151 Hf 122 Hn 48 Wn 47 — *CI* 82.7.

WINTUN AND YUKI MIXED.

Observer: V. K. Chesnut.

Female.

151. Age 25, Nettie Smith.[1] — St 1476 Str 1519 Sh 1215 A 635 Hs 800 Wsh 310 — Lh 189 Bh 149 Wf 140 Hf 101 Hn 42 Wn 38 — *CI* 78.9.

WYLACKIE.

Observer: V. K. Chesnut.

Males.

152. Age 60, Logan Gobert.[2] — St 1615 Str 1715 Sh 1359 A 743 Hs 773 Wsh 354 — Lh 198 Bh 148 Wf 151 Hf 117 Hn 51 Wn 44 — *CI* 74.7.

153. Age 50, Wylackie Charlie. — St 1600 Str 1654 Sh 1323 A 709 Wsh 379 — Lh 205 Bh 148 Wf 146 Hf 112 Hn 44 Wn 43 — *CI* 72.2.

HALF-BREEDS.

Observer: R. B. Dixon.

I. *Males.*

154. Age 19, Jack Cunningham. — St 1770 Str 1910 Sh 1470 A 830 Hs 900 Wsh 370 Bha 89 Lfi 103 — Lh 196 Bh 157

---

[1] Father, Wintun; mother, Yuki.

[2] Father, Wylackie; mother, Yuki.

Wf 147 HfI 185 HfII 123 Hn 43 Wn 40 Le 57 Vc 370 Hc 580 — *IStr* 107.9 *IA* 46.9 *IHs* 50.8 *IWsh* 20.9 — *CI* 80.1 (F. White, M. Maidu of Mountains).

155. Age 30, Enoch Pollard. — St 1820 Str 1840 Sh 1580 A 890 Hs 930 Wsh 410 Bha 90 Lfi 100 — Lh 199 Bh 162 Wf 150 HfI 201 HfII 128 Hn 60 Wn 40 Le 66 Vc 380 Hc 590 — *IStr* 101.1 *IA* 48.9 *IHs* 51.1 *IWsh* 22.5 — *CI* 81.4 (F. White, half Wintun; M. Wintun).

156. Age 30, John Duncan. — St 1640 Str 1710 Sh 1360 A 720 Hs 890 Wsh 375 Bha 86 Lfi 93 — Lh 199 Bh 162 Wf 153 HfI 186 HfII 122 Hn 53 Wn 41 Le 53 Vc 350 Hc 590 — *IStr* 104.3 *IA* 43.9 *IHs* 54.3 *IWsh* 22.9 — *CI* 81.4 (F. White, M. Maidu of Mountains).

157. Age 35, Sandy Wilson. — St 1600 Str 1710 Sh 1310 A 720 Hs 840 Wsh 360 Bha 92 Lfi 92 Lfa 440 — Lh 184 Bh 147 Wf 140 HfI 182 HfII 116 Hn 50 Wn 37 Le 62 Vc 330 Hc 540 — *IStr* 106.9 *IA* 45.0 *IHs* 52.5 *IWsh* 22.5 — *CI* 80.0 (F. Mexican, M. Maidu of Foot-Hills).

158. Age 35, Kurt Reeves. — St 1820 Str 1880 Sh 1490 A 820 Hs 940 Wsh 370 Bha 88 Lfi 98 — Lh 198 Bh 155 Wf 144 HfI 195 HfII 128 Hn 53 Wn 39 Le 71 Vc 370 Hc 570 — *IStr* 103.3 *IA* 45.0 *IHs* 51.6 *IWsh* 20.3 — *CI* 78.3 (F. White, M. Maidu of Mountains).

159. Age 35, Hiram Kelly. — St 1710 Str 1760 Sh 1380 A 730 Hs 920 Wsh 400 Bha 87 Lfi 89 Lfa 460 — Lh 200.5 Bh 159 Wf 150 HfI 186 HfII 124 Hn 50 Wn 41 Le 66 Vc 370 Hc 590 — *IStr* 102.9 *IA* 42.7 *IHs* 53.8 *IWsh* 23.4 — *CI* 79.9 (F. Hawaiian, M. Maidu of Foot-Hills).

160. Age 40, Ebro Johnson. — St 1660 Str 1790 Sh 1360 A 780 Hs 850 Wsh 460 Bha 88 Lfi 92 Lfa 480 — Lh 176 Bh 164 Wf 153 HfI 174 HfII 117 Hn 48 Wn 44 Le 66 — *IStr* 107.8 *IA* 47.0 *IHs* 51.2 *IWsh* 27.7 — *CI* 93.2 (White blood in second generation, Maidu of Mountains).

161. Age 40, Frank Perry. — St 1740 Str 1840 Sh 1350 A 770 Wsh 395 Bha 92 Lfi 95 — Lh 200 Bh 157 Wf 136 HfI 175 HfII 118 Hn 53 Wn 38 Le 63 — *IStr* 105.8 *IA* 44.3 *IWsh* 22.7 — *CI* 78.5 (F. White, M. Maidu of Foot-Hills).

162. Age 40, John Mullins. — St 1680 Str 1750 Sh 1380 A 740 Hs 900 Wsh 400 Bha 84 Lfi 93 Lfa 460 — Lh 200 Bh 161 Wf 150 HfI 185 HfII 122 Hn 52 Wn 42 Le 63 Vc 370 Hc 580 — *IStr* 104.2 *IA* 44.0 *IHs* 53.6 *IWsh* 23.8 — *CI* 80.5 (F. White, M. Maidu of Foot-Hills).

163. Age 50, Lafonso. — St 1560 Str 1640 Sh 1310 A 690 Hs 820 Wsh 380 Bha 88 Lfi 86 Lfa 480 — Lh 187 Bh 157 Wf

149 HfI 187 HfII 126 Hn 53 Wn 46 Le 70 Vc 365 Hc 570 — *IStr* 105.1 *IA* 44.2 *IHs* 52.6 *IWsh* 24.4 — *CI* 84.0 (F. Mexican, M. Maidu of Sacramento Valley).

II. *Females.*

164. Age 30, Emma Lidger. — St 1560 Str 1620 Sh 1270 A 690 Wsh 365 Bha 80 Lfi 86 — Lh 191 Bh 153 Wf 138 HfI 188 HfII 113 Hn 43 Wn 38 Le 60 Vc 370 Hc 580 — *IStr* 103.8 *IA* 44.2 *IWsh* 23.4 — *CI* 80.1 (F. White, M. Maidu of Foot-Hills).

165. Age 40, Mrs. Wilson. — St 1540 Str 1580 Sh 1250 A 670 Hs 830 Wsh 330 Bha 78 Lfi 87 Lfa 420 — Lh 182 Bh 146 Wf 135 HfI 172 HfII 109 Hn 41 Wn 36 Le 57 Vc 360 Hc 560 — *IStr* 102.6 *IA* 43.5 *IHs* 53.9 *IWsh* 21.4 — *CI* 80.2 (F. Mexican, M. Ololopa).

Observer: V. K. Chesnut.

Maidu Half-Breeds.

I. *Males.*

166. Age 4½, Herbert Johnson. — St 976 Str 971 Sh 767 A 428 Hs 557 Wsh 122 — Lh 178 Bh 145 Wf 115 Hf 82 Hn 36 Wn 32 — *CI* 81.5 (F. ½ Spanish, ½ Maidu of Foot-Hills; M same).

167. Age 5, John Brown. — St 1081 Str 1084 Sh 834 A 443 Hs 593 Wsh 229 — Lh 170 Bh 141 Wf 114 Hf 89 Hn 34 Wn 28 — *CI* 83.7 (F. Maidu of Foot-Hills, M. Spanish).

168. Age 8, Willie Perry. — St 1279 Str 1313 Sh 1050 A 588 Hs 686 Wsh 296 — Lh 176 Bh 139 Wf 116 Hf 92 Hn 36 Wn 31 — *CI* 79.0 (F. ½ White, ½ Maidu of Foot-Hills; M. Maidu of Foot-Hills with some white blood).

169. Age 13, John Franco. — St 1527 Str 1529 Sh 1268 A 682 Hs 770 Wsh 330 — Lh 187 Bh 150 Wf 133 Hf 111 Hn 49 Wn 37 — *CI* 80.2 (F. Spanish, M. Maidu of Foot-Hills).

170. Age 25, John Wilsey. — St 1756 Str 1809 Sh 1457 A 775 Hs 910 Wsh 303 — Lh 188 Bh 152 Wf 136 Hf 121 Hn 55 Wn 38 — *CI* 80.9 (F. White, M. Southern Maidu).

171. Age 28, Frank Feliz. — St 1695 Str 1750 Sh 1413 A 741 Hs 886 Wsh 370 — Lh 194 Bh 154 Wf 139 Hf 125 Hn 51 Wn 34 — *CI* 79.4 (F. Spanish, M. Maidu of Foot-Hills).

172. Age 32, Miltone Ayella. — St 1679 Str 1745 Sh 1392 A 784 Hs 860 Wsh 332 — Lh 190 Bh 151 Wf 137 Hf 115 Hn 44 Wn 34 — *CI* 79.5 (F. Spanish, M. Southern Maidu or Moquelumnan).

173. Age 50, Wm. Munsell. — St 1631 Str 1718 Sh 1354 A 730 Hs 868 Wsh 334 — Lh 201 Bh 150 Wf 138 Hf 120 Hn 48 Wn 46 — *CI* 74.6 (F. ½ Spanish, ½ Maidu of Foot-Hills; M. Maidu of Foot-Hills).

II. *Females.*

174. Age 6, Martha Perry. — St 1076 Str 1124 Sh 852 A 464 Hs 593 Wsh 237 — Lh 174 Bh 137 Wf 112 Hf 85 Hn 37 Wn 30 — *CI* 78.7 (F. ½ White, ½ Maidu of Foot-Hills; M. Maidu of Foot-Hills with some white blood).

175. Age 9, Florence Philips. — St 1264 Str 1250 Sh 1116 A 654 Hs 666 Wsh 261 — Lh 180 Bh 142 Wf 121 Hf 98 Hn 45 Wn 28 — *CI* 78.9 (F. Wylackie; M. ½ Spanish, ½ Maidu of Foot-Hills).

176. Age 10, Alma Bercier. — St 1332 Str 1342 Sh 1096 A 567 Hs 682 Wsh 277 — Lh 176 Bh 137 Wf 126 Hf 102 Hn 38 Wn 33 — *CI* 77.8 (F. French, M. Maidu of Foot-Hills or Wintun).

177. Age 14, Frankie Wesley. — St 1505 Str 1566 Sh 1254 A 678 Hs 787 Wsh 346 — Lh 176 Bh 138 Wf 125 Hf 102 Hn 40 Wn 30 — *CI* 78.4 (F. American, M. Maidu of Foot-Hills).

178. Age 20, Nancy Bercier. — St 1402 Str 1413 Sh 1138 A 618 Hs 792 Wsh 315 — Lh 181 Bh 148 Wf 135 Hf 110 Hn 44 Wn 32 — *CI* 81.8 (F. French, M. Maidu of Foot-Hills or Wintun).

179. Age 23, Emma Moore. — St 1566 Str 1614 Sh 1335 A 733 Hs 835 Wsh 346 — Lh 190 Bh 152 Wf 137 Hf 105 Hn 42 Wn 37 — *CI* 80.1 (F. White, M. Maidu of Foot-Hills).

180. Age 23, Susie Perry. — St 1691 Str 1725 Sh 1416 A 759 Hs 887 Wsh 356 — Lh 189 Bh 144 Wf 130 Hf 106 Hn 43 Wn 34 — *CI* 76.2 (F. Maidu of Foot-Hills, M. same with some white blood).

181. Age 25, Anna Felize. — St 1532 Str 1580 Sh 1257 A 672 Hs 835 Wsh 332 — Lh 196 Bh 149 Wf 133 Hf 105 Hn 46 Wn 33 — *CI* 760 (F. Spanish, M. Maidu of Foot-Hills).

182. Age 27, Beckie Brown. — St 1530 Str 1543 Sh 1300 A 697 Hs 811 Wsh 318 — Lh 182 Bh 143 Wf 132 Hf 111 Hn 42 Wn 36 — *CI* 78.6 (F. White, M. Maidu of Sacramento Valley)

183. Age 33, Polly Johnson. — St 1559 Str 1592 Sh 1273 A 709 Hs 828 Wsh 337 — Lh 191 Bh 147 Wf 130 Hf 104 Hn 47 Wn 40 — *CI* 770 (F. ½ Spanish, ½ Maidu of Foot-Hills; M. Maidu of Foot-Hills).

PIT RIVER HALF-BREEDS.

I. *Males.*

184. Age 16, Lorenzo Nuckolls. — St 1633 Str 1642 Sh 1369 A 691 Hs 826 Wsh 315 — Lh 192 Bh 156 Wf 137 Hf 113 Hn 47 Wn 36 — *CI* 81.2 (F. White, M. Maidu [?]).

185. Age 20, Pacenta Cione. — St 1628 Str 1742 Sh 1339 A 723 Hs 874 Wsh 358 — Lh 187 Bh 159 Wf 148 Hf 104 Hn 46 Wn 39 — *CI* 85.0 (F. Spanish, M. Pit River).

II. *Females.*

186. Age 9, Lolldortis Maria. — St 1284 Str 1289 Sh 1030 A 560 Hs 700 Wsh 272 — Lh 175 Bh 146 Wf 127 Hf 93 Hn 36 Wn 32 — *CI* 83.4 (F. ½ Spanish, M. Pit River).

187. Age 14, Josepha Maria. — St 1393 Str 1427 Sh 1153 A 628 Hs 718 Wsh 314 — Lh 183 Bh 146 Wf 130 Hf 91 Hn 36 Wn 34 — *CI* 79.8 (F. ½ Spanish, M. Pit River).

POMO HALF-BREEDS.

I. *Males.*

188. Age 13, Albert Frank. — St 1389 Str 1428 Sh 1137 A 628 Hs 722 Wsh 297 — Lh 177 Bh 140 Wf 126 Hf 103 Hn 43 Wn 35 — *CI* 79.1 (F. White; M. ½ Yuki, ½ Pomo).

189. Age 15, Carl Frank. — St 1503 Str 1518 Sh 1253 A 676 Hs 797 Wsh 297 — Lh 183 Bh 140 Wf 131 Hf 108 Hn 45 Wn 42 — *CI* 76.5 (F. White; M. ½ Yuki, ½ Pomo).

190. Age 30, Wm. Smith. — St 1870 Str 1896 Sh 1570 A 842 Hs 910 Wsh 337 — Lh 192 Bh 155 Wf 142 Hf 112 Hn 49 Wn 39 — *CI* 80.7 (F. White, M. Pomo).

191. Age 31, Raymond Brown. — St 1719 Str 1822 Sh 1409 A 787 Hs 890 Wsh 379 — Lh 192 Bh 135 Wf 140 Hf 119 Hn 52 Wn 38 — *CI* 70.3 (F. White, M. Pomo).

II. *Females.*

192. Age 3½, Mary Crane. — St 922 Str 920 Sh 722 A 394 Wsh 214 — Lh 170 Bh 134 Wf 111 Hf 82 Hn 30 Wn 29 — *CI* 78.8 (F. White; M. Pomo, mixed blood).

193. Age 6, Lelia Smith. — St 1155 Str 1143 Sh 902 A 486 Hs 609 Wsh 145 — Lh 177 Bh 145 Wf 112 Hf 94 Hn 36 Wn 30 — *CI* 81.9 (F. ½ White, ½ Pomo; M. same).

194. Age 7, Lena Smith — St 1264 Str 1286 Sh 1016 A 516 Hs

671 Wsh 268 — Lh 170 Bh 139 Wf 118 Hf 94 Hn 37 Wn 29 — *CI* 81.8 (F. ½ White, ½ Pomo; M. same).

195. Age 17, Barbary Greaves. — St 1588 Str 1620 Sh 1321 A 731 Hs 812 Wsh 338 — Lh 189 Bh 152 Wf 137 Hf 103 Hn 45 Wn 33 — *CI* 80.5 (F. White, M. Pomo).

196. Age 20, Emma Smith. — St 1534 Str 1564 Sh 1265 A 684 Hs 809 Wsh 321 — Lh 176 Bh 140 Wf 135 Hf 100 Hn 47 Wn 34 — *CI* 79.5 (F. White, M. Pomo).

197. Age 25, Belle Smith. — St 1681 Str 1743 Sh 1420 A 736 Hs 829 Wsh 346 — Lh 188 Bh 142 Wf 128 Hf 107 Hn 46 Wn 35 — *CI* 75.5 (F. White, M. Pomo).

198. Age 30, Eliza Crane. — St 1534 Str 1565 Sh 1229 A 676 Hs 789 Wsh 334 — Lh 194 Bh 151 Wf 136 Hf 104 Hn 44 Wn 44 — *CI* 77.8 (F. ½ Pomo).

199. Age —, Beulah Smith. — St 1113 Str 1128 Sh 885 A 464 Wsh 234 — Lh 176 Bh 139 Wf 120 Hf 83 Hn 34 Wn 28 — *CI* 79.0 (F. ½ White, ½ Pomo; M. same).

YUKI HALF-BREEDS.

I. *Males.*

200. Age 5, Fred Dorman. — St 1103 Str 1127 Sh 880 A 462 Hs 615 Wsh 240 — Lh 178 Bh 137 Wf 111 Hf 88 Hn 36 Wn 31 — *CI* 77.0 (F. Yuki; M. ½ White, ½ Yuki).

201. Age 7, Dan Dorman. — St 1181 Str 1197 Sh 940 A 530 Hs 643 Wsh 260 — Lh 174 Bh 143 Wf 117 Hf 86 Hn 35 Wn 32 — *CI* 82.2 (F. Yuki; M. ½ White, ½ Yuki).

202. Age 9, Jesse Frank. — St 1292 Str 1327 Sh 1058 A 580 Hs 682 Wsh 285 — Lh 179 Bh 141 Wf 122 Hf 93 Hn 40 Wn 33 — *CI* 78.8 (F. White; M. ½ Yuki, ½ Pomo).

203. Age 17, Geo. Moore. — St 1541 Str 1574 Sh 1242 A 669 Hs 825 Wsh 371 — Lh 185 Bh 150 Wf 138 Hf 108 Hn 47 Wn 40 — *CI* 81.1 (F. Spanish, M. Yuki).

204. Age 26, Geo. Dew. — St 1689 Str 1788 Sh 1401 A 762 Hs 863 Wsh 394 — Lh 191 Bh 150 Wf 150 Hf 116 Hn 47 Wn 39 — *CI* 78.5 (F. Spanish; M. ½ Yuki, ½ Maidu of Foot-Hills).

205. Age 27, Henry Murphy. — St 1694 Str 1734 Sh 1392 A 740 Hs 848 Wsh 386 — Lh 189 Bh 158 Wf 152 Hf 119 Hn 50 Wn 39 — *CI* 83.6 (F. White, M. Yuki).

206. Age 30, Jack Anderson. — St 1696 Str 1817 Sh 1403 A 789 Hs 867 Wsh 367 — Lh 197 Bh 147 Wf 142 Hf 120 Hn 52 Wn 38 — *CI* 74.6 (F. ½ Yuki, ½ White; M. Yuki).

II. *Females.*

207. Age 18, Jessie Duncan. — St 1550 Str 1557 Sh 1274 A 661 Hs 509 Wsh 340 — Lh 178 Bh 153 Wf 133 Hf 104 Hn 46 Wn 37 — *CI* 86.0 (F. White, M. Pit River [?]).

208. Age 24, Maggie Dorman. — St 1600 Str 1670 Sh 1317 A 721 Hs 846 Wsh 364 — Lh 187 Bh 143 Wf 136 Hf 107 Hn 49 Wn 41 — *CI* 76.5 (F. White, M. Yuki).

WINTUN HALF-BREEDS.

I. *Males.*

209. Age 10, Roy Steele. — St 1313 Str 1266 Sh 1067 A 566 Hs 707 Wsh 278 — Lh 178 Bh 141 Wf 128 Hf 99 Hn 40 Wn 33 — *CI* 79.2 (F. Wintun, M. ¼ White, ¾ Wintun).

210. Age 28, Henry Hayes. — St 1679 Str 1669 Sh 1400 A 704 Hs 888 Wsh 385 — Lh 195 Bh 158 Wf 146 Hf 116 Hn 50 Wn 40 — *CI* 81.0 (F. White, M. Wintun).

II. *Females.*

211. Age 5, Josie Smith. — St 944 Str 948 Sh 718 A 394 Hs 520 Wsh 204 — Lh 168 Bh 134 Wf 118 Hf 79 Hn 31 Wn 30 — *CI* 79.8 (F. Negro; M. ½ Yuki, ½ Wintun).

212. Age 14, Callie Pollard. — St 1545 Str 1561 Sh 1278 A 734 Hs 792 Wsh 329 — Lh 186 Bh 143 Wf 137 Hf 111 Hn 45 Wn 36 — *CI* 76.9 (F. Wintun; M. ½ White, ½ Wintun).

213. Age 29, Maggie Hoxie. — St 1597 Str 1645 Sh 1230 A 613 Hs 864 Wsh 360 — Lh 187 Bh 147 Wf 141 Hf 117 Hn 46 Wn 37 — *CI* 78.6 (F. ½ White, ½ Wintun; M. Wintun).

MISCELLANEOUS.

I. *Males.*

214. Age 24, Alex Fraser. — St 1765 Str 1900 Sh 1467 A 814 Hs 863 Wsh 396 — Lh 205 Bh 157 Wf 150 Hf 112 Hn 46 Wn 39 — *CI* 76.6 (F. White; M. Kato, Athapascan).

215. Age —, Walter Clark. — St 1704 Str 1750 Sh 1424 A 738 Hs 868 Wsh 371 — Lh 189 Bh 147 Wf 142 Hf 112 Hn 45 Wn 34 — *CI* 77.8 (F. ?, M. ?).

II. *Female.*

216. Age 35, Kate Webber. — St 1537 Str 1558 Sh 1284 A 681 Wsh 342 — Lh 181 Bh 138 Wf 137 Hf 109 Hn 43 Wn 44 — *CI* 76.2 (F. ?, M. ?).

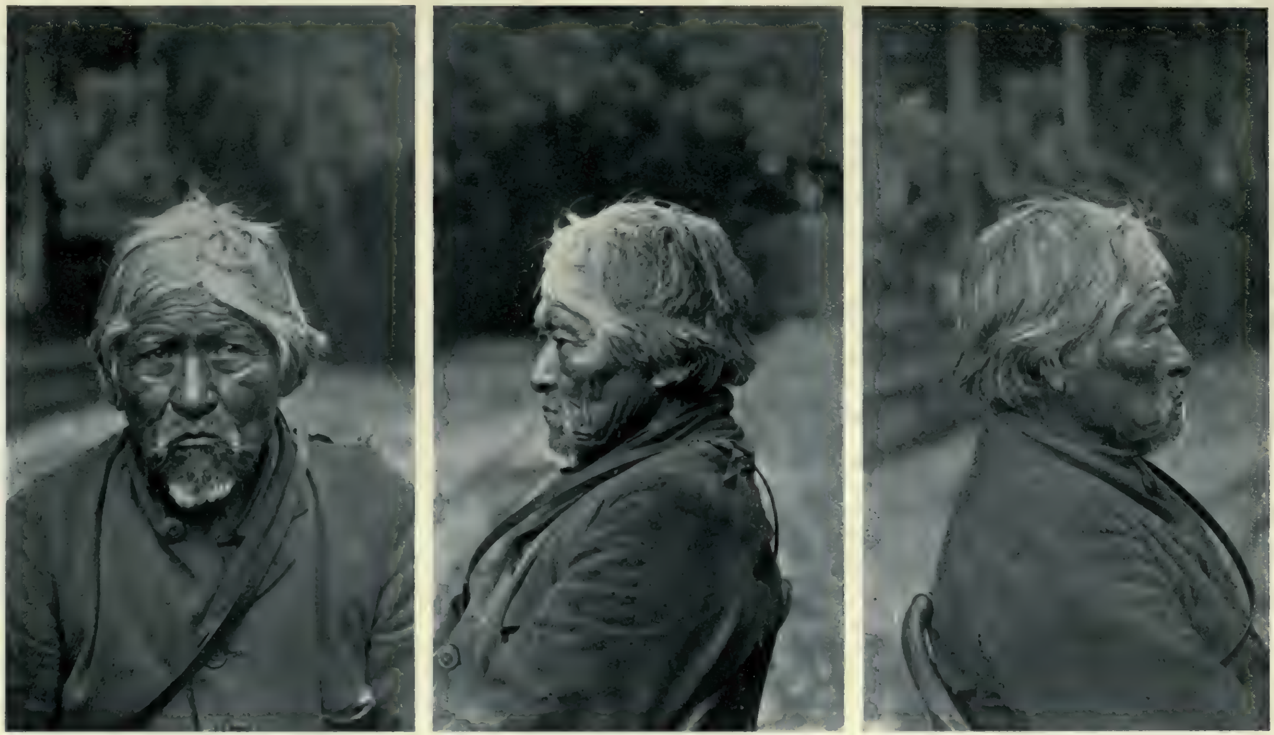
TABLE OF RELATIONSHIPS.

f = father; m = mother; so = son; d = daughter; br = brother; si = sister

2 br of 3
3 br of 2
5 f of 48
6 so of 13
7 so of 22, 24
11 br of 25
13 f of 6
14 f of 26
19 br of 20
20 br of 19
22 f of 7
24 m of 7
25 si of 11
26 d of 14, 28
28 m of 26
29 so of 34
34 f of 29
38 f of 42, 44
42 d of 38
42 si of 44
44 d of 38
44 si of 42
48 d of 5
51 br of 56
56 br of 51
61 br of 62
62 br of 61
64 grandd of 67
65 si of 66
66 si of 65
67 grandm of 64
72 so of 94
72 br of 87, 88
74 so of 93
78 f of 85
85 d of 78, 138
87 d of 94
87 si of 72, 88
88 d of 94
88 si of 72, 87
93 m of 74
94 m of 72, 87, 88
99 m of 188, 189, 202
100 f of 200, 201
104 so of 109
105 so of 125
109 f of 104
115 f of 127
125 f of 105
127 d of 115, 137
133 ½si of 208
137 m of 127
138 m of 85
142 si of 143
143 si of 142
149 m of 155, 213
151 m of 211
154 br of 158
155 so of 149
155 br of 213
158 br of 154
161 f of 168, 174
166 so of 183
166 grandso of 173
168 so of 161, 180
168 br of 174
173 f of 183
173 grandf of 166
174 d of 161, 180
174 si of 168
175 d of 181
176 si of 178
178 si of 176
180 m of 168, 174
181 m of 175
183 m of 166
183 d of 173
185 ½br of 186, 187
186 si of 187
186 ½si of 185
187 si of 186
187 ½si of 185
188 so of 99
188 br of 189, 202
189 so of 99
189 br of 188, 202
190 f of 199
192 d of 198
193 d of 197
193 si of 194
194 d of 197
194 si of 193
196 m of 199
197 m of 193, 194
198 m of 192
199 d of 190, 196
200 so of 100, 208
200 br of 201
201 so of 100, 208
201 br of 200
202 br of 188, 189
202 so of 99
208 m of 200, 201
208 ½si of 133
209 so of 213
211 d of 151
213 m of 209
213 si of 155

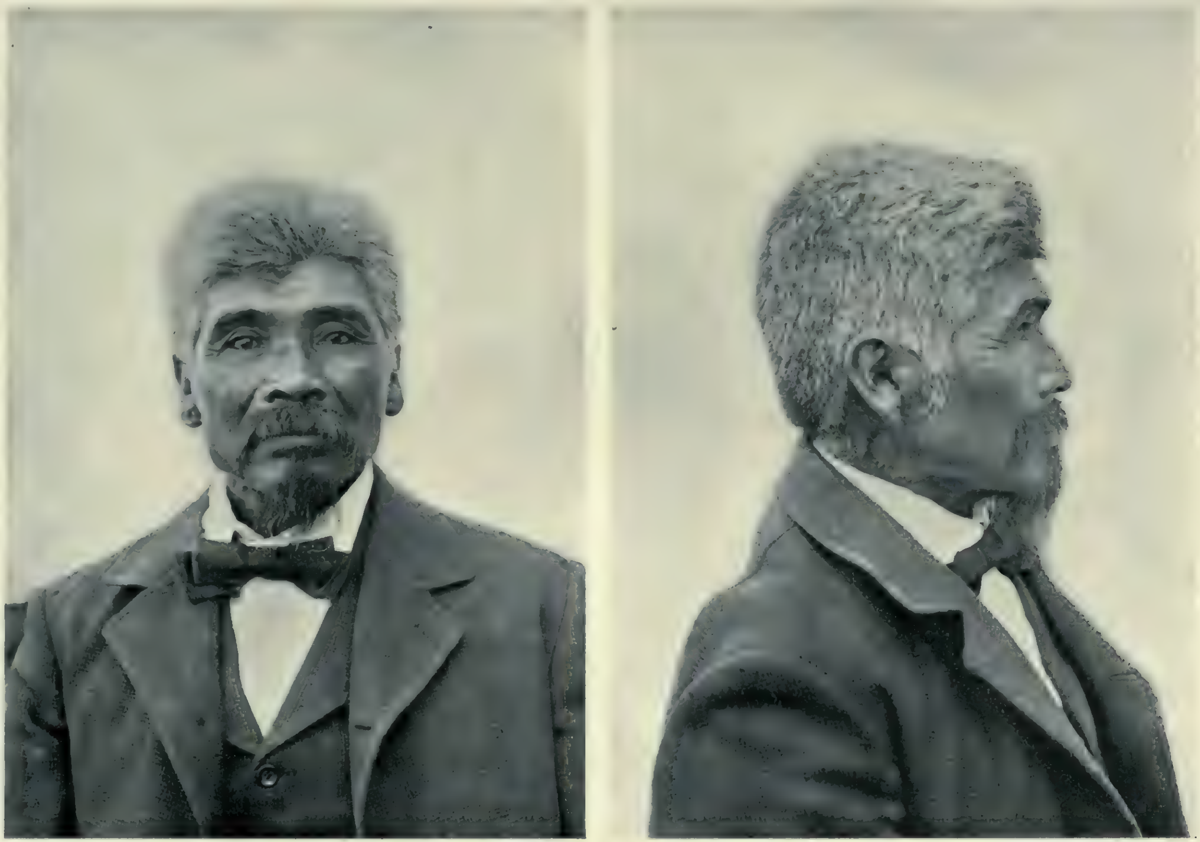
NUMBER OF CHILDREN OF WOMEN.

No.	Age.	Living.		Dead.		No.	Age.	Living.		Dead.	
		Sons.	Daughters.	Sons.	Daughters.			Sons.	Daughters.	Sons.	Daughters.
24	50	2	—	—	2	138	38	—	2	4	—
25	30	—	—	—	—	139	40	—	—	—	—
26	30	3	2	—	—	140	40	—	—	2	2
27	35–40	1	—	—	—	141	40	—	1	1	—
28	60	—	1	5	3	142	40	—	—	—	—
47	20	2	—	—	—	143	45	—	—	2	2
49	40	—	—	—	1	144	50	—	—	2	2
59	25–30	1	3	—	—	145	55	—	1	1	2
60	50	—	—	3		146	60	—	—	1	1
64	25	—	—	1	—	147	70	—	—	—	2
66	35	2	—	—	—	148	32	—	—	1	3
67	45	—	—	3		149	40	1	2	—	—
68	45–50	—	2	—	—	151	25	2	1	—	—
88	16	—	1	—	—						
91	35	—	1	3	3	164	30	1	1	—	—
93	45	1	—	3	1	165	40	3	2	—	—
94	45	1	2	5	—	178	20	—	—	—	—
95	50	—	1	3	3	179	23	—	1	—	—
96	75	—	4	2	2	180	23	1	3	—	—
99	38	3	1	2	3	181	25	—	3	1	2
130	17	1	—	—	—	182	27	5	—	—	—
131	18	—	2	1	—	183	33	2	—	1	1
132	18	1	—	—	—	196	20	1	2	1	1
133	19	2	—	—	—	197	25	—	4	—	—
134	25	—	—	—	—	198	30	—	1	1	—
135	25	—	2	—	2	207	18	1	—	—	—
136	30	1	—	—	2	208	24	3	1	—	—
137	37	1	—	5	1	213	29	2	2	—	—



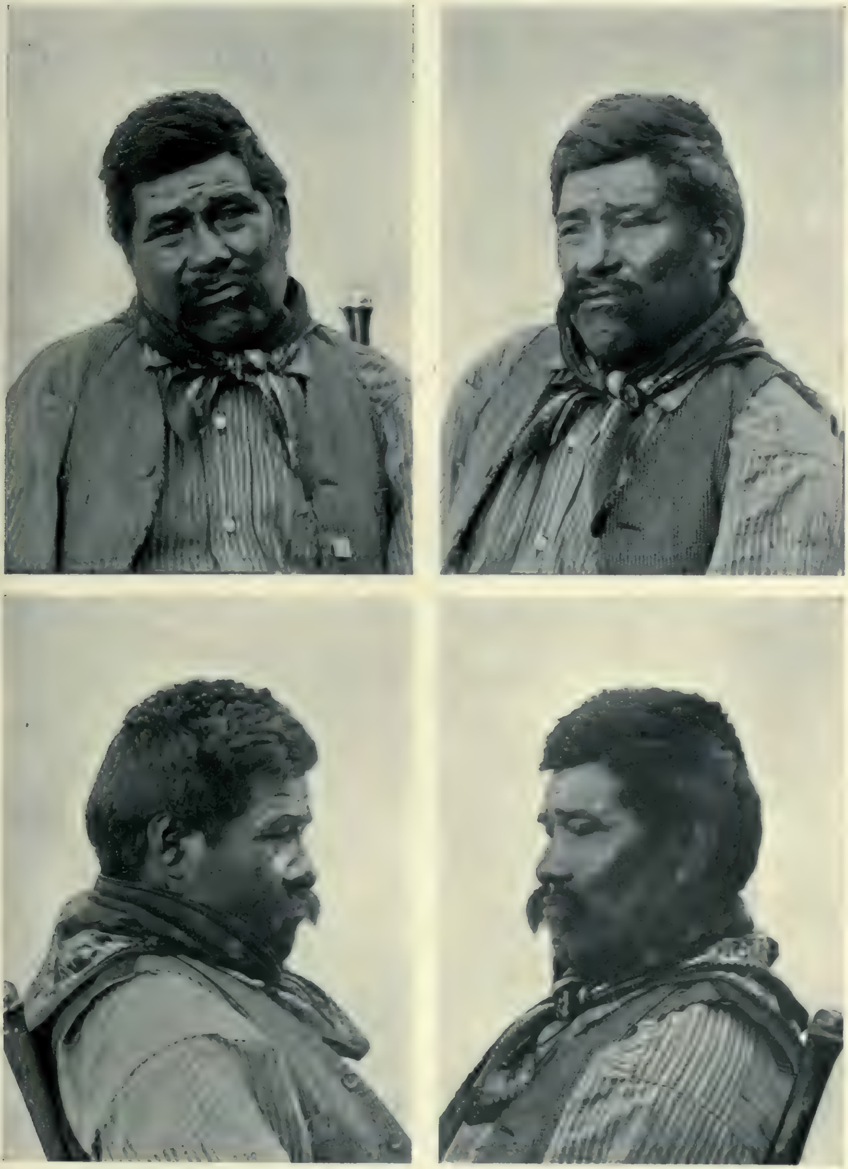
BILL BROOKS.

MAIDU MAN OF FOOT-HILL REGION. AGE 70. (No. 22, p. 360.)



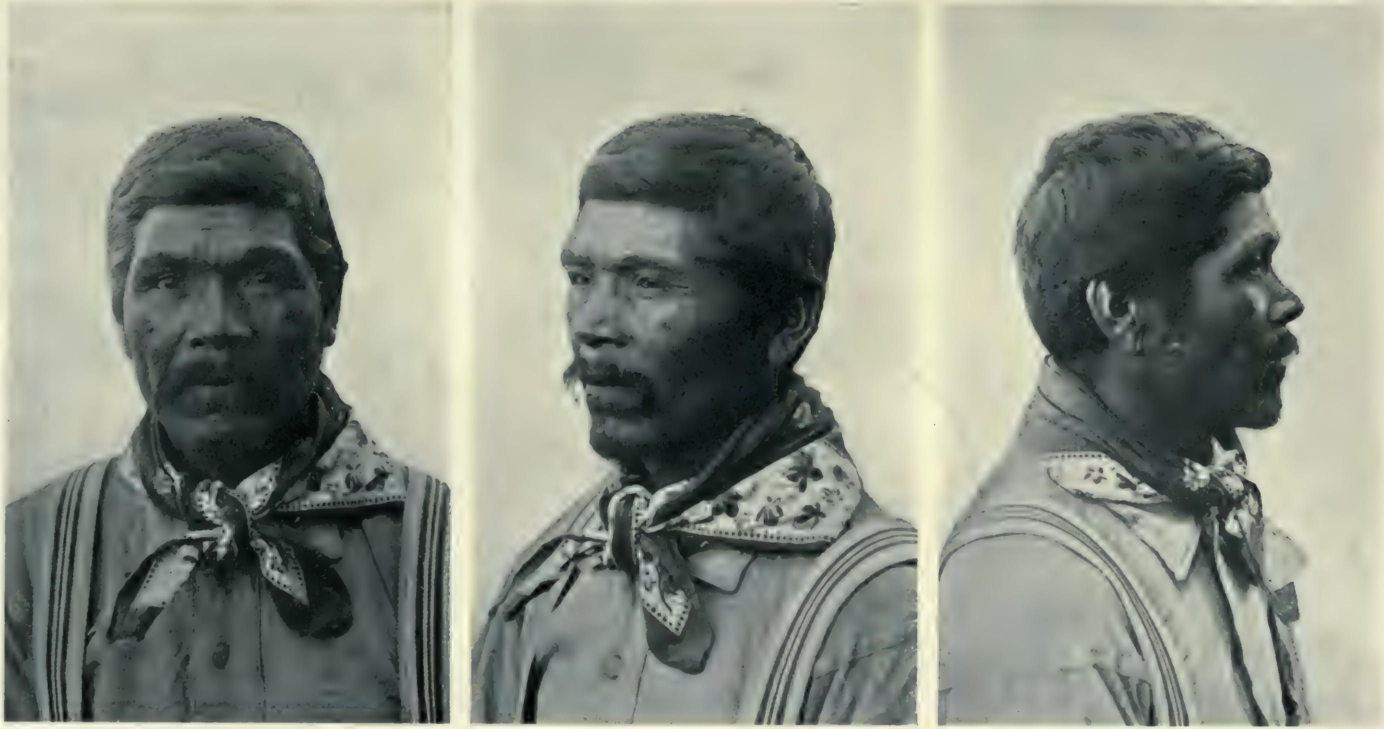
DAN WRIGHT.

MAIDU MAN OF FOOT-HILL REGION. AGE 55–60. (No. 17, p. 360.)



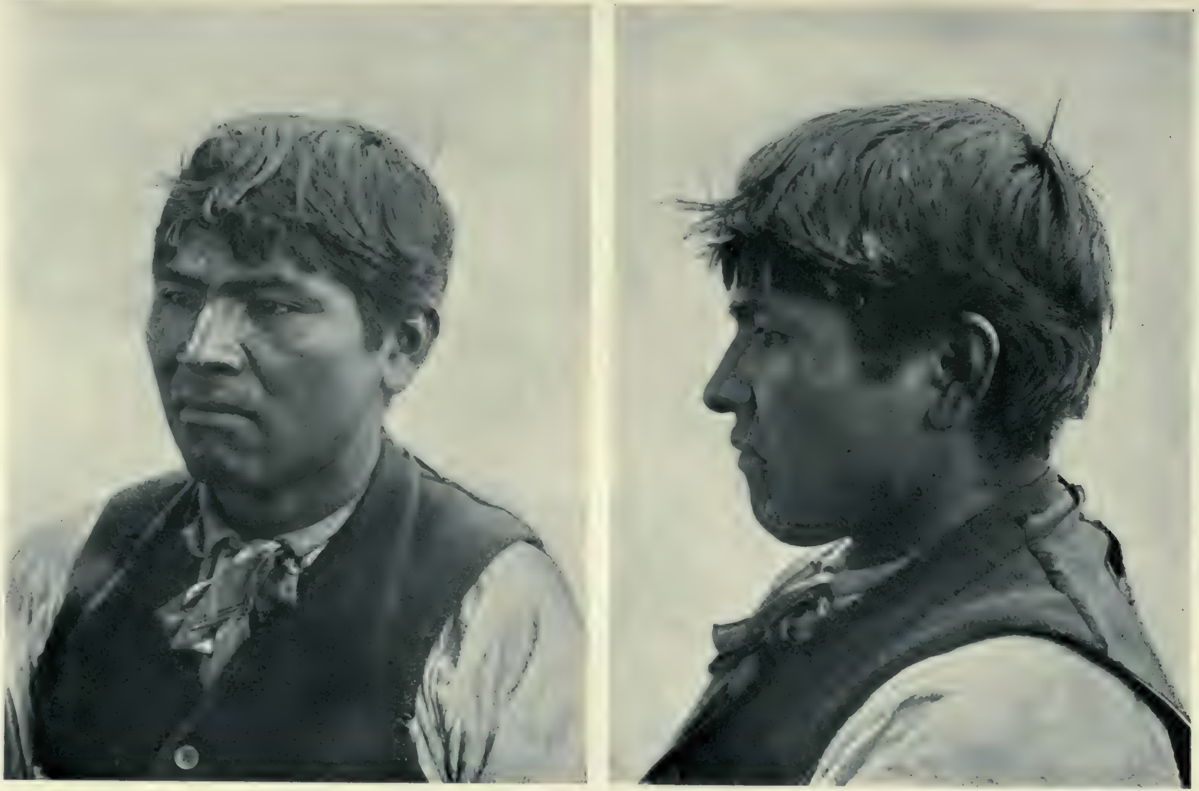
WALTER UPTOGRATH.

MAIDU MAN OF FOOT-HILL REGION. AGE 45. (No. 15, p. 360.)



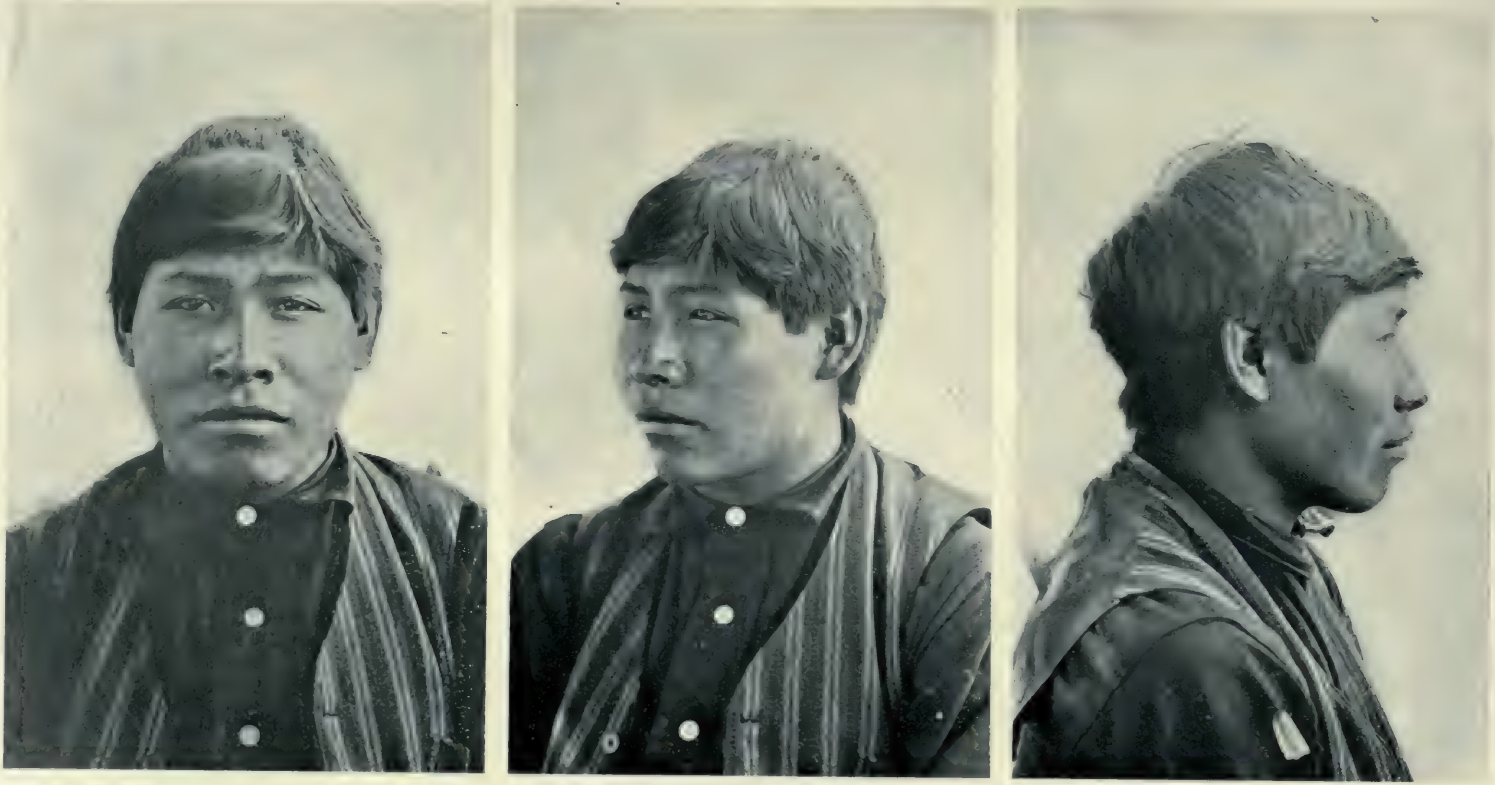
LAWSON ANDERSON.

MAIDU MAN OF FOOT-HILL REGION. AGE 40. (No. 11, p. 359.)



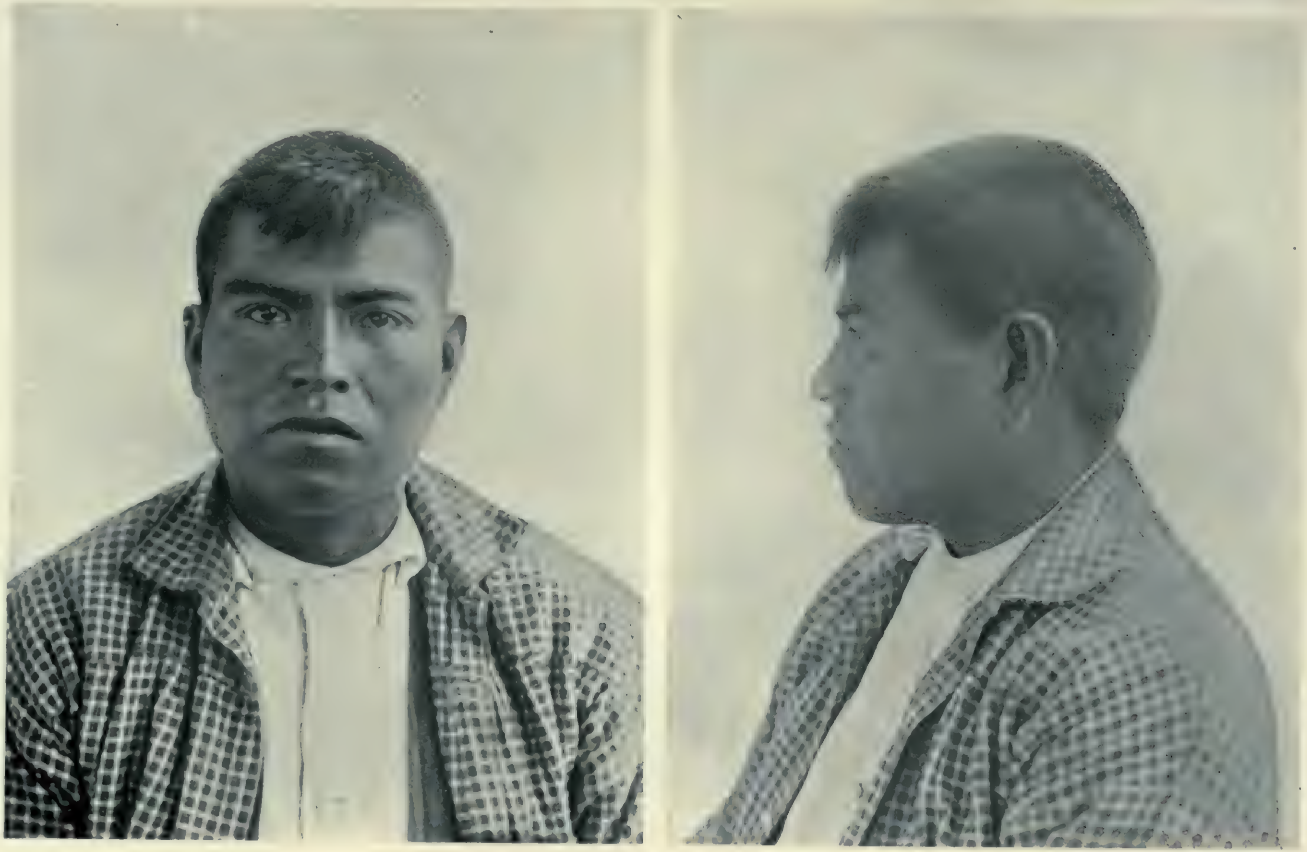
MOSY HIGGINS.

MAIDU MAN OF MOUNTAINS. AGE 27. (No. 55, p. 363.)

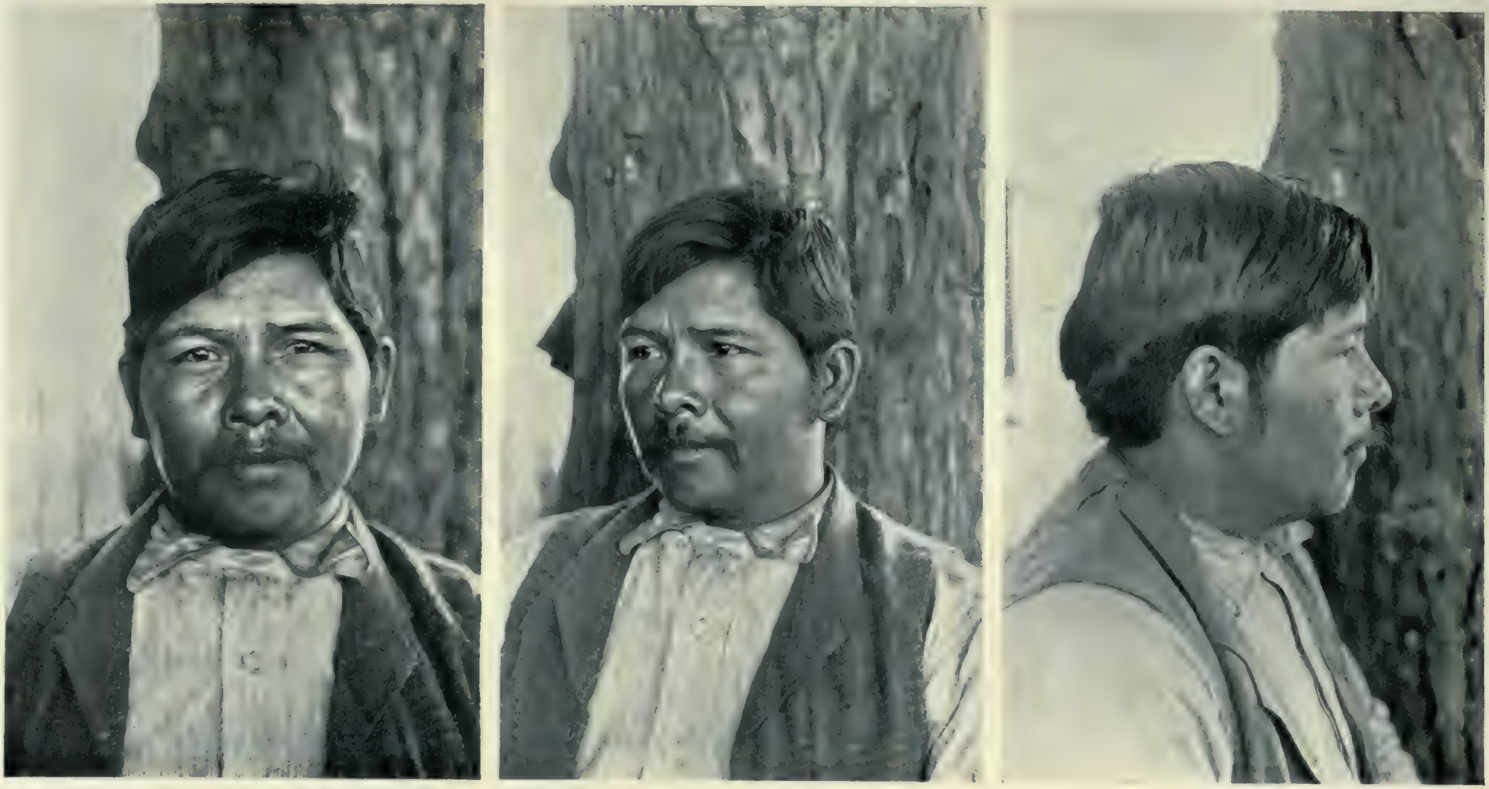


Johnny Bob.

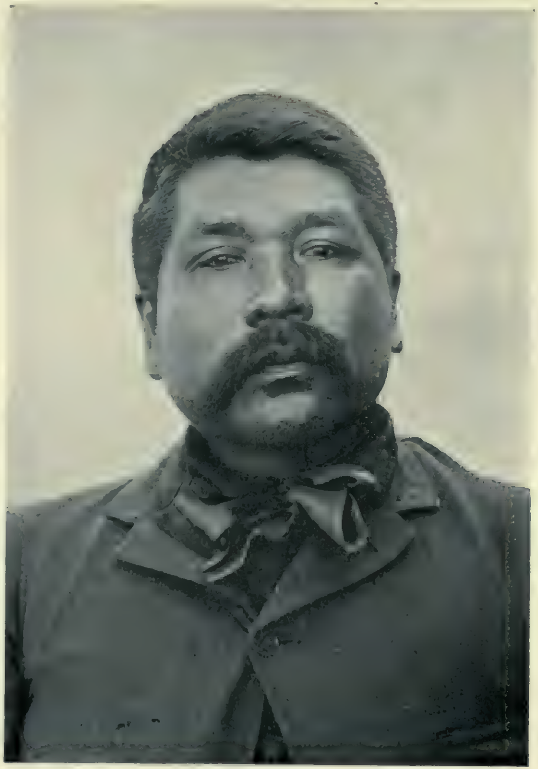
Maidu Man of Mountains. Age 20. (No. 54, p. 363.)



JOHNNY PAI YUTE.
MAIDU MAN OF MOUNTAINS. AGE 20. (No. 52, p. 363.)

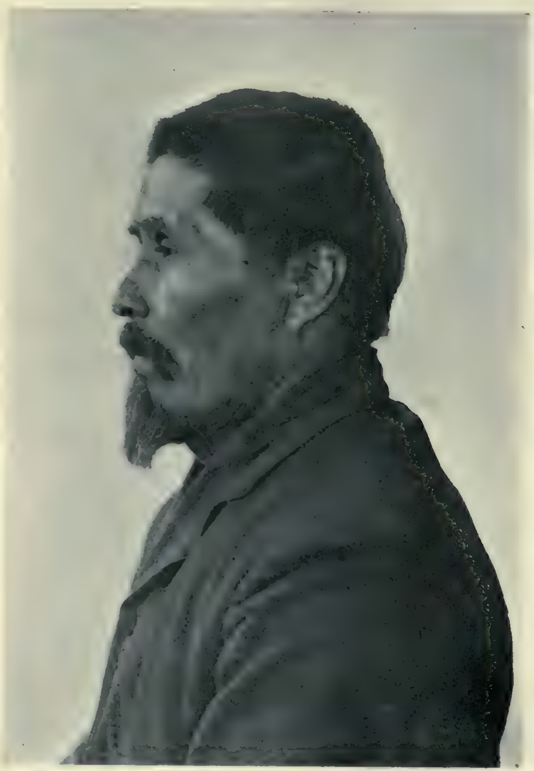


FRANK LOUHEAD.
SOUTHEASTERN MAIDU MAN.



Henry Clay.

Maidu Man of Foot-Hill Region. Age 40–42.
(No. 12, p. 359.)



Round-Mountain Jack.

Yana Man.

V.—THE SHASTA.

BY ROLAND B. DIXON.

PLATES LIX–LXXII.

CONTENTS.

PAGE

INTRODUCTION 383
BIBLIOGRAPHY 383
Geography and History 384
  Habitat and Boundaries 386
  Topography and Environment 387
  History 389
  Migration 390
Material Culture 391
  Manufactures 391
    Work in Stone 391
    Work in Wood, Bone, and Shell 394
    Preparation of Hides 397
    Cordage and Netting 398
    Basketry and Weaving 398
    Feather-Work 403
  Clothing and Personal Adornment 407
  Dwellings and Household Utensils 413
  Food and its Preparation 423
  Hunting and Fishing 428
  Transportation and Trade 432
  Warfare 436
  Games and Amusements 441
Art 446
  Decorative Art 446
  Music 449
Social Organization and Law 451
  Social Organization 451
  Crimes and Punishments 453
Birth, Puberty, Marriage, and Death 453
  Birth 453
  Names 456
  Puberty 457
  Marriage 461
  Death and Burial 465

PAGE
Religion.. 468
    Beliefs regarding the Soul................................ 468
    Conceptions of the World................................ 470
    Miscellaneous Beliefs...................................... 470
    Shamanism... 471
    Ceremonials... 489
Mythology.. 491
Conclusion... 494
Appendix... 495
    The Konomī'ihu.. 495

INTRODUCTION.

THE material presented in the following paper was collected by the writer during the seasons of 1900, 1902, 1903, and 1904, partly from the few Shasta resident on the Siletz Reservation in Oregon, but mainly from those still remaining in their former habitat in California. A large part of the information was secured from Sargent Sambo, hereditary chief of the Kī'katsik or Wirūhikwai'iruk! a Shasta of the Klamath River. Further material was obtained from several old men in this section and from other individuals in Scott Valley, at Forks of Salmon, Yreka, and elsewhere. A considerable mass of linguistic material and texts was also secured, and is in preparation. Every facility was given to the work of the Expedition, and much assistance given at Siletz in 1902 by Mr. D. D. McArthur, and again in 1903 and 1904 by Mr. J. J. McKoin, United States Indian agents. Thanks are also due to Mr. Conrad Litchen of Oak Bar, Cal., for many courtesies.

BIBLIOGRAPHY.

The literature dealing with the ethnology of the Shasta is exceedingly scanty. Except for the brief references by name in a few early books of travel, the following list comprises practically all the more important titles.

BURNS, L. M. Digger Indian Legends (Land of Sunshine, Vol. XIII, pp. 130–134, 223–226, 310–314, 397–402).

DIXON, R. B. The Shasta-Achomā'wi: A New Linguistic Stock with Four New Dialects (American Anthropologist, N.S., Vol. VII, pp. 213–218).

DIXON, R. B. The Mythology of the Shasta-Achomā'wi (American Anthropologist, N.S., Vol. VII, pp. 607–612).

EMMONS, Lieut. G. H. In the United States Exploring Expedition, Vol. V, pp. 238–241. London, 1845.

LYON, C. The Manufacture of Obsidian Arrow-heads (American Historical Magazine, Vol. III, p. 214).
MILLER, J. Life amongst the Modocs. London, 1873.
POWERS, S. Tribes of California (Contributions to North American Ethnology, Vol. III, pp. 243–251).

GEOGRAPHY AND HISTORY.

Unlike many of the Indian stocks in California, the Shasta have, almost from the beginning, been known by a distinct and invariable name. The earlier forms — such as Saste, Shaste, Sasty, Shasty, Chasty, Shastl, Shastika — have given place to the form Shasta, which is that now mainly used to designate the Indians of this stock. The origin and meaning of this term (the various forms of which, in spite of the slight differences shown above, are clearly one and the same throughout) are both obscure. So far as my information goes, it is not a term used by the Shasta for themselves, either as a whole or in part, although there is some doubt as to whether or not the term may not have been used to designate a portion of the stock, i.e., that about the eastern portion of Shasta Valley. Its use, however, as such, is recent. It is not a term for the Indians of this stock in the languages of the surrounding stocks, whose names for the people are known, although in use by both Achomā'wi and Atsugē'wi. It is emphatically denied by the Shasta that it is a place-name for any section of the territory occupied by them, and indeed there is some question as to whether it is even a word proper to their language. After persistent inquiry, the only information secured which throws any light on the matter is to the effect that about forty or fifty years ago there was an old man living in Shasta Valley whose personal name was Shastika (Sŭstī'ka). He is reported to have been a man of importance; and it is not impossible that the name Shasta came from this Indian, an old and well-known man in the days of my informant's father, who was living at the time of the earliest settlement in this section, — in the '50's. Inasmuch as the suffix *ka* is the regular subjective suffix, we should have Sŭstī as the real name of this individual, from which the earlier forms of

Shasty, etc., could easily have been derived. The derivation from the Russian **ЧИСТЫЙ**, meaning "white, clean," — a term supposed to have been applied by the settlers at Fort Ross to Mount Shasta, — is obviously improbable. The matter is further complicated by the difficulty of clearing up the precise relationships of the so-called "Chasta" of Oregon, and of explaining the recurrence of the same term in the name of the Athabascan tribe of the Chasta-Costa of the Oregon coast.

Until recently, the Shasta have been regarded as forming a linguistic stock by themselves, and as being entirely unrelated to any other stock on the continent. Gatschet, however, some fifteen years or more ago, suggested a possible or indeed probable affiliation with the Achomā'wi (Pit River Indians) or Palainihan stock, but did not demonstrate it. The linguistic material collected by the Huntington Expedition has, however, supplied the needed evidence; and the relationship between the two stocks seems now practically certain. A portion of the evidence to this effect has recently been published,[1] and the Shasta may therefore be considered as forming one member of what has been called the Shasta-Achomā'wi stock. This binomial term has now, however, been discarded as undesirable, and has been replaced by Shastan. The entire stock includes, besides the Shasta and Achomā'wi, also the Atsugē'wi, or Hat Creek Indians, together with three small fragments,—the Konomī'hu of Forks of Salmon, the New River Shasta, and the Ōkwa'nūtcu.

The Shasta are known to their neighbors on the east and south by the following terms: Sastī'dji by the Achomā'wi, although the term Nō'mkidji (probably borrowed from the Wintun) was also used; Sŭstī'dji by the Atsugē'wi; Wai'kenmuk by the Wintun of the McCloud and upper Sacramento. The Ōkwa'nūtcu were known to the Achomā'wi and Atsugē'wi as Yè'ti (from Yèt, the term in use for Mount Shasta) and also as Iqŭsadē'wi.

---

[1] Dixon, The Shastā-Achomā'wi: A New Linguistic Stock with Four New Dialects (American Anthropologist, N.S., Vol. VII, pp. 213–218).

HABITAT AND BOUNDARIES. — The area occupied by the Shasta lies partly in California and partly in Oregon, including almost the whole of Siskiyou County in the former, and parts of Jackson and Klamath Counties in the latter State. On the south they were in contact with the Wintun; on the east, with the Achomā'wi and the Lutuā'mi or Klamath Lake Indians; on the north, with the Takelma and the various Athabascan tribes along the Rogue and Umpqua Rivers; and on the west, with the Athabascans, the Takelma, and the Karok. In more detail the area occupied may be described as follows. Beginning at Mount Shasta, the boundary ran nearly due north, over Goose Nest mountain to the Klamath River, reaching the river a little above the mouth of Jenny Creek. From this point on the river, the rather vague line seems to have swung to the east a little, so as to include within Shasta territory all the head-waters of Jenny Creek, and then to have followed roughly along the divide to Mount Pitt. Here the line turns westward to the Rogue River at the mouth of Little Butte Creek, and thence along Rogue River to Table Rock at the mouth of Stewart River, or, as it is also known, Bear Creek. From this point, the line ran apparently southward, along the divide between the western tributaries of Stewart River and the eastern tributaries of Applegate Creek, swung around the head of the latter, and curved sharply west, following the crest of the Siskiyous to the vicinity of Thompson Creek, where the boundary touched the Klamath again at the village of Ussini. Southward from here, the divide between the western tributaries of Scott River and the eastern tributaries of the Klamath and Salmon Rivers seems to have been the line dividing the Shasta from the Karok and from the two small fragments of the Shastan stock, — the Konomī'hu and the New River Shasta. From the extreme southwestern corner of Siskiyou County the boundary ran east to Mount Shasta again, following approximately the divide between the Trinity and Sacramento Rivers on the south and the Scott and Shasta Rivers on the north.

Concerning a part of this territory — that, namely, within the limits of the State of Oregon — there is still some uncertainty.

According to the best information obtainable, the Rogue River Indians (Athabascans) and the Shasta have long been enemies, and had contended since time immemorial for the Oregon area now claimed by the Shasta. At a period about a hundred years ago, as nearly as could be estimated, the Shasta declare that they finally drove the Rogue River people completely out of the territory in dispute, and that they were themselves in occupancy of it when the white trappers first penetrated to the region. That the Rogue River Indians still claimed the area as theirs, however, is shown by the treaty of Sept. 10, 1853, by which they ceded this section and also a portion of what was, I believe, unquestionably Shasta territory lying within the State of California.[1] That full dependence cannot, however, be placed upon such cessions, is shown, for example, in the cession by the Klamath Lake Indians, in 1851 and again in 1864, of Shasta Valley itself,[2] an integral part of the Shasta territory, if there is any such. Perhaps the most that can be said at present, in the absence of any information from the side of the Rogue River Indians, is that the ownership of the portion of Oregon claimed by the Shasta was vigorously disputed, and that it is not unlikely that the Shasta were the original possessors.

TOPOGRAPHY AND ENVIRONMENT. — The region occupied by the Shasta is rugged and mountainous almost throughout, and, except for the immediate valley of the Klamath River, has everywhere an elevation of over eight hundred metres. The portion of Shasta territory lying within California, that which seems unquestionably theirs, divides itself topographically into three sections, comprising respectively the Klamath River Valley, Scott Valley, and Shasta Valley.

The first of these includes the course of the Klamath from near Fall Creek to Indian Creek, a stretch of, roughly, seventy miles. In this part of its course, the river is a rapid stream, flowing in a deep canyon valley, with little level land along its banks, except for the deltas of the larger tributary streams.

---

[1] Royce, Indian Land Cessions (Report of the Bureau of Ethnology, 1896–97, Part 2, pp. 778, 789, and Plates CXV, CLVIII).

[2] Ibid., pp. 788, 789, 834, 835, and Plates CXIV, CXV

The climate, like that of most of the Shasta area, is characterized by hot summers (often with frequent thunderstorms) and moderately cold winters, in which there is generally, upon the mountains at least, a very heavy snowfall. In the early days the river teemed with salmon and other fish, game was abundant in the mountains, and there was a fairly large supply of acorns and other vegetable foods.

Scott Valley, the second of the sections, is one of that class of broad, flat-floored mountain valleys that are found especially well developed in the northern Sierras. Some eighteen or twenty miles in length, and five or six in width, watered by a considerable stream, and surrounded by high, rugged mountains, it formed an almost ideal spot for an Indian community. As in the region along the Klamath River, fish and game were abundant, acorns were to be had in considerable quantities, and pine-nuts and other vegetable foods added to the general food-supply.

Shasta Valley is considerably larger than Scott Valley, but, on the whole, far less uniform in its character. Much of the southern end of the valley is covered by old lava-flows, or small volcanic cones, interspersed with swamps. The central and smoother portions are more favorable in their character, but are treeless, and broken up by many small buttes. The heat in this portion of Shasta Valley in summer is often great. Game was originally abundant here and in the mountains round about.

Corresponding roughly to these three topographical divisions were, apparently, three sections or groups of the Shasta. The three divisions were distinguished by slight differences of language and custom, and governmentally each formed more or less of a unit. The Klamath River Shasta were known most commonly by the term Kamma'twa. although they were also called Wirūhikwai'iruk!a; the Scott Valley people were known as Kī'katsik or Irūai'tsu. The former term seems to include sometimes also the Shasta Valley people; and the latter refers more particularly to the northern end of Scott Valley, Irū'ai being the name for Indian Creek. That portion of the stock occupying Shasta Valley was commonly spoken of as Ahōtirē′itsu (from Ahōtidä″ĕ, "Shasta Valley"). The Oregon Shasta were known as Kahō′sadi.

The Shasta seem to have had a considerable number all together of small villages or settlements; and the names and locations of these, so far as known, are shown — together with other geographical names and the divisions of the stock — on the map, Plate LIX.

HISTORY. — The first Europeans to come in contact with the Shasta in their own habitat were probably the adventurous fur-hunters of the second and third decades of the nineteenth century. Scott River was known to them as Beaver River, and was much frequented as a wintering place. One of the earliest references to them is their mention by Gairdner[1] in the list of tribes obtained by him from Michel la Framboise in 1835.

Old men now living recall stories of the excitement consequent on the arrival of these first Europeans, and still tell of their fringed buckskin clothes, and of the long knives they brought to trade. All agree that the strangers came down the Klamath River from the east.

Lieutenant Emmons and his party, who, as members of the United States Exploring Expedition, made the overland trip from the Columbia River to San Francisco in 1841, are almost the first to speak of the Shasta from personal experience, but the account given[2] is very brief. Thus it was not until the discovery of gold in the region, in 1850, that the section was much visited.

The sudden flood of whites brought into the Shasta country by the gold-finds had its usual sad result. Yreka (named for Wai′īka, as the Shasta call Mount Shasta) was settled, and became a bustling, roaring mining-town; and we may read in Joaquin Miller's "Life among the Modocs" how cruelly the Indians of that region and along the Klamath River were treated. The Shasta played quite an important part in the so-called "Rogue River wars" of 1853–54, and 1855–56, bands from as far as Scott and Shasta Valleys coming north across the Siskiyous to aid their Rogue River brethren.[1] In this conflict, however, as in many other of the Indian troubles in this section, the whites were as much to blame, if not more so, as the Indians themselves. This war — together with unprovoked murder, and wholesale massacre, disease, and the famine consequent on the destruction of the food-supply — produced a rapid diminution in numbers, till there remains to-day, all told, probably less than twoscore widely scattered full-blood members of the Shasta.

---

[1] Gairdner, Notes on the Indian Tribes on the Upper and Lower Columbia (Journal of the Royal Geographical Society, Vol. XI, p. 256).

[2] United States Exploring Expedition, Vol. V, pp. 239, 240.

Except for four individuals at Siletz, one or two at Grand Ronde Reservation in Oregon, and one woman at Yakima, all the Shasta now known to be living are scattered throughout their old territory. A few are at Yreka, much mixed with Wintun; there are several in Scott Valley; and perhaps a score or so at various points along the Klamath River. In addition to these full-bloods, there are quite a number of half-breeds. The census figures relating to this region are of little value, as the majority of the individuals enumerated belong to the Yurok, or perhaps to the Lutuā'mi stocks. Estimates of the population before 1850 are very varied. De Mofras[2] in 1840–42 estimated the Saste at four hundred; Emmons,[3] in 1841, at five hundred. McKee[4] in 1851 secured information as to fifty villages, from which, allowing sixty persons as an average, he obtained three thousand as the total number of the Shasta. From the numbers mentioned in the accounts of the Rogue River war, however, there does not seem to be any warrant for assuming so large a population, and I should doubt if there were really more than two thousand of the Shasta at the time when the first European contact occurred.

MIGRATION. — No tradition has been thus far secured as to any migration. The Shasta regard themselves as having been created in the region they now occupy, and have no knowledge of any other area. In this they are in accord with the majority of the California tribes. Some evidence, however, is given by their general culture, which makes it not impossible that they are in origin an Oregonian stock.

---

[1] H. H. Bancroft, History of Oregon, Vol. II, Chaps. VII, XII, XV, XVI; also Report on Indian Hostilities in Oregon and Washington, 34th Cong., 1st Sess., House Ex. Doc., Vol. XI, No. 93.

[2] Duflot de Mofras, Exploration du Territoire de l'Oregon, etc., Vol. II, p. 335. Paris, 1844.

[3] United States Exploring Expedition, Vol. V.

[4] Schoolcraft, History, Condition, and Prospects, etc., Vol. III, p. 171.

Material Culture.

Manufactures. *Work in Stone.* — The implements of stone made by the Shasta comprise knives, arrow-points, scrapers, pipe-tips, pestles, and soapstone vessels. Mortars and stone pipes, while known, were apparently not made.

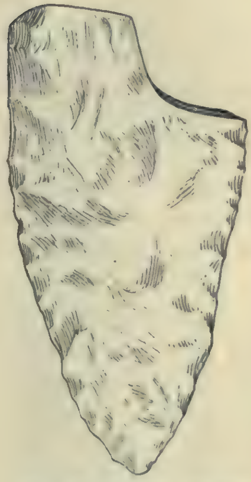


Fig. 68 ($\frac{50}{3145}$). Obsidian Knife. Length, 8 cm.

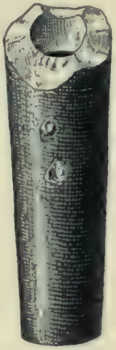


Fig. 69 ($\frac{50}{4078}$). Fragment of a Stone Pipe. Length, 7 cm.

The Shasta were fortunate in having in their vicinity a considerable abundance of obsidian, from which knives, arrow-points, and scrapers of the best quality could be made. The great majority of these implements were therefore of this substance, and were well made. Knives (Fig. 68) seem often to have been used without hafting of any kind, although sometimes a piece of buckskin was wrapped about the end. Arrow-points were made by holding the flake or piece of obsidian in a split stick, as in a vise, one end of the stick being held under the left arm. A piece of sharpened or split antler was used in flaking the point. Scrapers were very often made of red obsidian, although deer-ulnæ were, on the whole, more commonly used than stone scrapers. Pipe-tips were either of serpentine, or other fine-grained stone. They were ground laboriously into shape, the hole being pierced by pounding with a piece of antler, aided by sand. What is apparently a portion of a pipe wholly of stone was picked up on the surface near Honolulu, on the Klamath River (Fig. 69). It is, however, different from the type of pipe used by the Shasta, and was regarded by them as mysterious, and probably endowed with great magic power. It is nicely finished on the exterior.

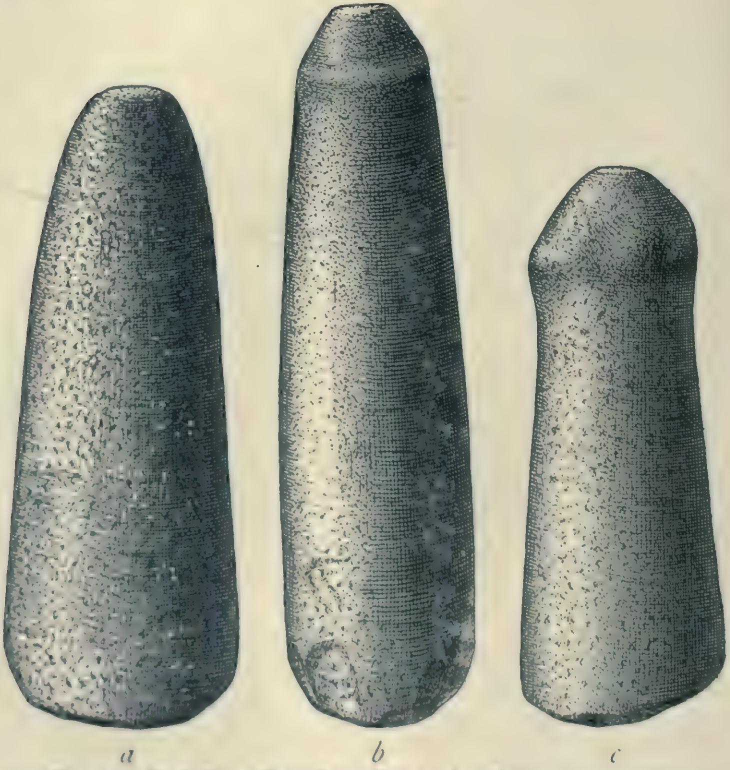


Fig. 70 (*a* [illegible], *b* [illegible], *c* [illegible]). Stone Pestles. Length of *a*, 17 cm.; maximum circumference, 20 cm.

Pestles (Fig. 70) for acorn-pounding were generally cylindrical, and from twenty to twenty-five centimetres long. In many cases they were well made, some having a slight knob at the upper end, as shown in *c*. Others, again, were rough and irregular. Soapstone vessels were considerably used for holding fish, fish-oil, etc. They were shallow oval platters, not over thirty or forty centimetres long, and were pecked and scraped out, and into shape, by means of harder stones. Few, if any, of these vessels are to be found to-day.

According to the unanimous statements of the Shasta, mortars were not used by them. Within the area occupied, however, mortars are found, in some places in large numbers. They occur on the surface, and also buried to depths of several feet in the gravel or soil. Large numbers of these are to be found in several of the village stores in the region, and date from the earlier mining-days of the '50's and '60's. In general, these mortars are rather less finished than the mortars found in the Sacramento Valley and Sierra region, and some are taller, and more cylindrical in shape. The feeling of the Shasta in regard to these mortars is a very strong one. They are considered as very mysterious objects, are never touched except by the shamans, and, if one is found or seen at any place, it is given a wide berth. The mortars are sometimes regarded as of themselves powerful Axē'ki, or "pains," although in other cases it is thought that they merely indicate the proximity of an Axē'ki's dwelling, which may be some near-by ledge or pinnacle of rock. The Axē'ki, as will be explained later, are spirits who are the guardians and familiars of the shamans, and who aid them in curing or causing disease. Mortars are supposed to have the power of independent motion, and to be continually moving about the country. One day a mortar will be seen here, the next some distance away, travelling every day several feet. In some cases, mortars are said to have power to change their shape. Pestles, in particular small pestles, were similarly regarded. Those feared did not seem to differ in any respect from those in common use, but were, nevertheless, thought to be very dangerous objects if found lying about, and were made use of by shamans in some of their nefarious practices. A pestle of this sort (found and not made), unless it was placed on solid rock, would sink into the ground in a few days, and would then travel about under the surface, and reappear at some other place far away. Stone pipes were, like these mortars and pestles, occasionally found, and had an equally bad reputation. They might be handled only by shamans, and are said to have been eagerly sought for by them for evil purposes.

This complete absence of the use of mortars; the beliefs in connection with certain pestles and pipes; the fear felt of all these objects, and the consideration of them as intelligent, supernatural beings, with the power of locomotion — would seem to indicate that the mortars found here were not made by the Shasta, nor by their ancestors within traditional times. A somewhat similar state of affairs was shown to exist in the case of the Maidu,[1] although there, the feeling of fear and superstitious reverence was confined to the mortars alone, and was not as pronounced as among the Shasta.

Work in Wood, Bone, and Shell. — Except for their bows, the Shasta used wood for but few implements, the most important of which were spoons, pipes, and mush-paddles. Spoons (Fig. 71) were made of both wood and horn. In type they are closely similar to those used by the Karok, Yurok, and Hupa, although, as a rule, they were less decorated by carving. The pipes (Fig. 72) used here were of the same

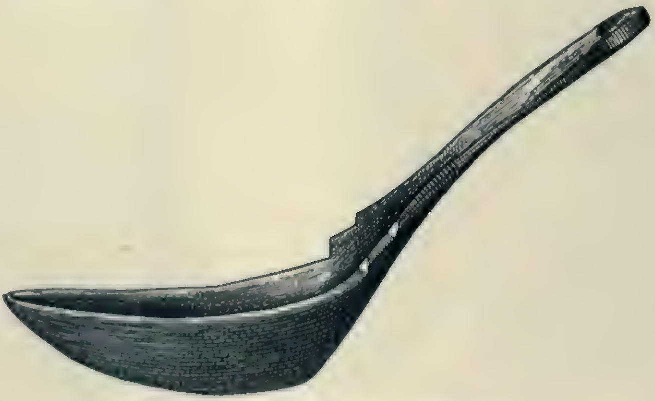


Fig. 71 ([illegible]). Wooden Spoon. Length, 19 cm.

---

[1] See pp. 136, 137 of this volume.

character as those made by the three tribes just mentioned living lower down the river. The form was the usual tubular, trumpet-shaped one, varying from fifteen to twenty centimetres in length. The pipes are often so regularly and beautifully made as to suggest machine-turning. The method of boring the piece of wood from which the pipe was to be made was exceedingly ingenious, if we may believe the account given by several informants independently. As described, the method was applicable to only one variety of wood (unidentified), — a variety which was quite hard, yet possessed a small, somewhat porous pith or heart-wood. A number of sticks of this wood were, so it is said, placed on end in a dish of salmon-oil, first on one end, and then on the other. By this means, the pithy, porous heart-wood absorbed considerable oil, much more than did the remainder of the wood. This central core of heart-wood was then dug out at one end, as deeply as could be, with a fine-pointed bone awl. Then a small grub or worm, infesting the dried salmon as preserved in the houses, was placed in the excavation, and this was then sealed with a bit of pitch. The grub thus imprisoned is declared to have eaten the oil-soaked pith or heart-wood, following the core, from one end to the other, finally eating its way out at the opposite end. Many of the grubs died, or did not take kindly to the oil-soaked pith; but, out of a dozen or more prepared sticks hung up under the roof during the winter, one or two were, it is claimed, generally found bored in the spring.

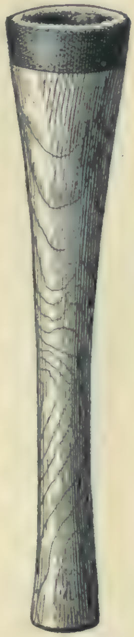


Fig. 72 ($\frac{50}{1600}$ A). Tobacco Pipe. Length, 15 cm.

Owing to the rapids and swift current of the Klamath, and the impermanent nature of the other streams (which often nearly dry up in the summer) the Shasta made little in the way of canoes. Occasionally they obtained them from the Karok or Yurok, but they rarely made them themselves.

When made, they were dug out from sugar-pine logs, as a rule, and were crude imitations of the well-known, square-ended type characteristic of the lower river.

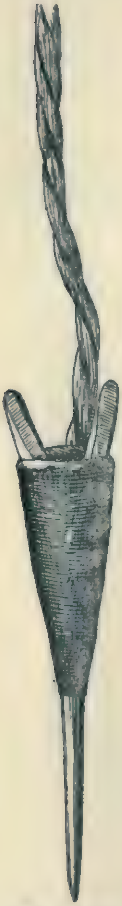


Fig. 73 ([illegible]). Salmon-gig. Length of gig, 10 cm.

Bone and antler were used for scrapers, awls, wedges, arrow-flakers, and salmon-gigs. The deer-ulna or elk-rib was most commonly the form of scraper used in the preparation of hides. Awls and basket-needles were small and neat. Elk-horn wedges were used for splitting logs, being driven by stone mauls held in the hand without handles. Arrow-flakers of split or sharpened deer-antler were used generally without handles. The salmon-gig (Fig. 73) was of the usual type, but now, as a rule, is made of nails.

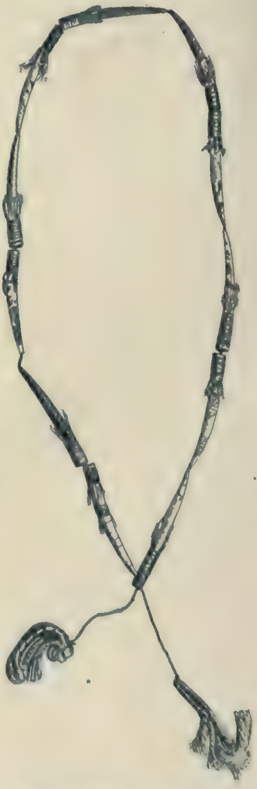


Fig. 74 ([illegible]). Necklace. Total length, 59 cm.

The chief use of shell was for ornament, and, in the form of beads, as currency. Women's skirts were elaborately decorated with beads, pieces of abalone, and dentalia. The disk-shaped beads of the type so common in the more southern parts of the State were not so much used here. The abalone and dentalia were obtained in trade with the tribes of the lower river, and also from the Rogue River people in Oregon. Dentalia were much used as currency. Abalone and other shells were much used, particularly for necklaces, ear-ornaments, etc. As currency, dentalia were divided into two classes, — those measuring less than the distance from the base of the little finger to the crease between the second and third joints, and those measuring more than this distance. The value of the latter was twice that of the former, and they are now regarded as equalling a dollar. These larger dentalia were often decorated by incised lines, or the addition of tiny red feathers (Fig. 74). Dentalia of the large variety were generally strung on small cords, and, together with the smaller variety, were kept in small cylindrical baskets provided with a cover fitting, it is said, inside the rim. These baskets were finely made, and were carefully kept in small buckskin bags. Horn purses like those used by the Hupa were rarely found here. Disk beads, kept in strings, were used to some extent as currency also; the unit of measure being the length of a string stretching from hand to hand while the arms are extended at full length on each side, the centre of the string hanging to the navel. While speaking of currency, mention might be made here of the use of woodpecker-scalps (Fig. 75) for this purpose also. These were carefully dried and prepared, and, as in the case of the dentalia, were of two grades, the scalp of the large woodpecker being worth twice that of a small one. They were kept in rolls of buckskin to preserve them flat and unruffled.

Preparation of Hides. — Deerskins were dressed and prepared by the Shasta in the usual manner. After soaking, the hair was removed, and the hide grained by scraping with a stone or bone scraper, the hide being laid on a slanting post set in the ground. Deer-brains were used to soften the skin, and, following this, the hides were well smoked and sunned. The skins were finally whitened by rubbing with white clay, and were, when finished, fine, soft, and of very good quality.

The Shasta made, they say, from rawhide a receptacle somewhat in the shape of the ordinary conical pack-basket. The rim of the affair was of wood, over which the rawhide was lapped and sewed. It was carried on the back like a pack-basket, and served for gathering and carrying grass-seed and small roots. The seed-beater used here seems often also to have been made in part of rawhide, this being stretched over a framework of basketry. Both these seed-beaters and pack-baskets have gone out of use.

Cordage and Netting.—Cord and rope were made from the wild hemp (*Apocynum* sp.) and from a variety of grass as yet undetermined. The nets used were chiefly pocket-shaped, and were set up and used as described under hunting and fishing. Seine-nets were used to some extent also. The manufacture of nets was in the hands of the men. The cord was kept on a netting-shuttle similar to those in use among the Hupa.[1] Mesh-measures of the type used lower down the river were also formerly in use.

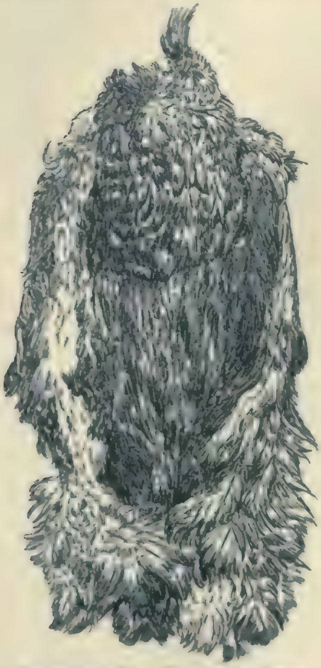


Fig. 75 ($\frac{50}{3197}$, B). Woodpecker-Scalp used as Currency. Length, 10 cm.

The manufacture of the netted cap, so characteristic of the Maidu and other stocks of Central California, seems to be lacking here. It is said, however, that the Shasta Valley people did make and wear these caps, obviously in imitation of those worn by the Wintun. There is also no trace, apparently, of the "kiseaqot," or netted head-decoration worn by the Hupa[2] and other Indians of the lower Klamath. Netted sacks were also lacking, it seems; although in the vicinity of Seiad Valley, where the Shasta abutted on the Karok, a few were to be found.

Basketry and Weaving.—Basketry would appear to have been for a long period less important as an art than it was among the people of either Central or Northwestern California; and in earlier times, as now, the Shasta relied to a great extent on other tribes for their baskets. At the present day, scarcely a single basket is made by the Shasta; and all that they use, or sell to collectors, are bought from the Karok and other lower Klamath peoples.

---

[1] Goddard, Life and Culture of the Hupa (University of California Publications, American Archæology and Ethnology, Vol. I, p. 35, and Fig. 2, Plate 14).

[2] Ibid., pp. 83, 84, and Plate 7.

The materials formerly used for basketry by the Shasta were various. For the ribs, or radial elements, they generally used the hazel (*Corylus californica*) or the willow (*Salix* sp.), whose roots, as well as whose twigs, were employed, the former, it is said, much more than the latter. The roots were always used to make the outer ring on the bottom of the basket. The twining-element was almost exclusively the root of the yellow pine (*Pinus ponderosa* Dougl.). The root was cut or dug up in pieces thirty centimetres or more in length, and from five to ten centimetres in diameter. These pieces were first baked and then steamed, after which they were carefully split into thin sheets from four to six centimetres wide. In this form they were preserved, and, when wanted for use, were again boiled and steamed, and split into finer strips. The strips thus prepared were dyed black (by an infusion of acorn-shells) or red (with alder-bark). In the latter case, the bark was chewed by the woman, who meanwhile passed the strip of pine-root back and forth through her mouth. This twining-element was overlaid, in caps and in the finer sorts of basketry, with basket-grass (*Xerophyllum tenax* Nutt.) or with the black, shining stem of the maidenhair-fern (*Adiantum pedatum* L.).

The types and forms (Fig. 76, *a–g*) of baskets as used among the Shasta, if we may judge from the baskets collected, were very similar to, indeed practically identical with, those used by the Yurok, Karok, and Hupa. There were large storage-baskets (*f*, *g*), smaller cooking-baskets (*c*, *d*), platter or tray baskets (*a*), and small trinket-baskets (*b*). Burden or pack baskets of conical shape (*e*) were also in use; and these, together with many of the tray-baskets, were of the open-work style of make. Occasionally these were finished by a band of the ordinary closer twining (Plate LXVII, Fig. 2).

Owing to the very considerable doubt as to the real provenance of most of the baskets secured, and to the possibility that the original Shasta technique may have, in the case of the baskets secured at Siletz, suffered a change from contact with the Oregonian Athabascans, a minute discussion of the technique seems inadvisable. This is the more true, in that all the baskets obtained from the Shasta in California agree in almost every particular with those from the Hupa, Karok, and Yurok, so fully described by Goddard[1] and Kroeber.[2] Like them, they are exclusively of the twined variety, the simple twining being the form most frequently

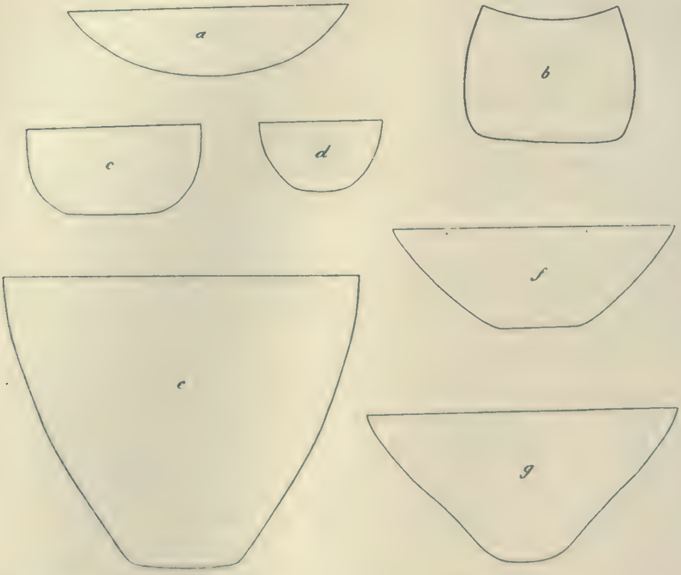


Fig. 76 (*a* $\frac{50}{3182}$, *b* $\frac{50}{1681}$, *c* $\frac{50}{1880}$, *d* $\frac{50}{1881}$, *e* $\frac{50}{3183}$, *f* $\frac{50}{3186}$, *g* $\frac{50}{3180}$). Outlines of Shasta Basket-forms.

---

[1] Goddard, op cit., pp. 38–48.

[2] Kroeber, Basket Designs of the Indians of Northwestern California (University of California Publications American Archæology and Ethnology, Vol. II, pp. 109–116).

employed, although three-strand twining occurs on the bottoms of baskets, and occasionally in a narrow band near the rim. As in the baskets of the northwestern type, the warps are, in the open-work baskets and occasionally in other baskets, sometimes crossed just below the edge (Plates LX, Fig. 1; LXVIII, Fig. 1; LXX, Fig. 2).

On the bottoms of baskets, as a rule, groups of from three to five warps are included between the woof-strands, the number decreasing to a single warp when the upward curve of the basket is reached. On the mortar-basket the same strengthening-rods are used as among the Hupa and the Karok, and in the same manner[1] (Fig. 77). Here, as well as there, the designs are produced by overlaying, the method followed being a double overlay. Among these supposed Shasta baskets, as well as among those of the northwestern type, open-work basket-trays and pack-baskets are common, and in both these regions we find the method of ornamentation by means of dyed warps (Plates LXVIII, Fig. 1, and LXX, Figs. 1 and 2).[2] In the close-twined baskets from Siletz, a double warp is used instead of the single warp, as in California. Whether this is due to difference of material, or to the influence of another technique, it is impossible to say, in the absence of basketry collections from that portion

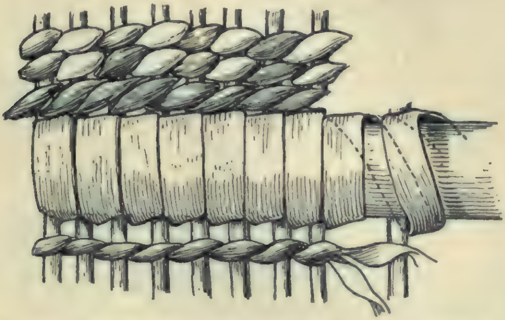


Fig. 77 ($\frac{60}{5188}$). Strengthening-rod in Mortar-basket, Plate LXVI, Fig. 2.

---

[1] Goddard, op. cit., Plate 24, Fig. 1.
[2] Kroeber, op. cit., Plate 18, Figs. 1 and 3

of Oregon. The edges of the cooking and tray baskets obtained in California, with one exception, are unfinished, except by cutting off the warps closely, as in the basketry of the region to the west. One basket, however (Plate LXII, Fig. 3), shows an edge in which the warps are turned over, as in Fig. 78. All baskets secured at Siletz, from the Shasta there, have a somewhat similar type of edge (Fig. 79). All open-work pack-baskets and mortar-baskets also have the warp-rods bent over and twined in, as shown in Fig. 80.

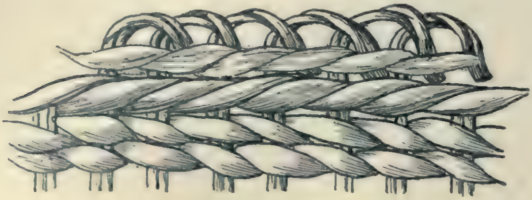


Fig. 78 ($\frac{50}{1081}$). Detail of Edge on Basket, Plate LXII, Fig. 3.

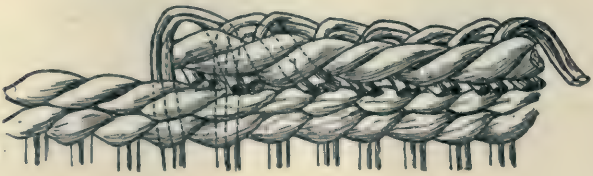


Fig. 79 ($\frac{50}{1083}$). Detail of Edge on Basket, Plate LXII, Fig. 2.

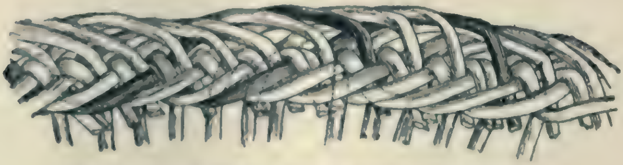


Fig. 80 ($\frac{50}{3184}$). Detail of Edge on Basket, Plate LXIX, Fig. 1.

The buckskin fringes on the women's skirts are wrapped for the greater part of their length with grass (*Xerophyllum tenax* Nutt.). This wrapping is shown in Fig. 81. The technique is the same as that employed by the Hupa.

Mats of reeds (Plate LXXI) were made by twining woof-strands about the reed warps, every three or four inches, doubling these at the sides, and finishing the ends of the mat in a braid, as shown in Fig. 82.

Feather-Work. — As compared with the Maidu and the Indians of the Central Californian area, or even with the Hupa, the Shasta use of feathers was undeveloped. In place of the many varieties of feather ornaments used in ceremonials by the majority of Californian Indians, the Shasta had but few, and these were rather simple. They were the feather band, worn either about the head, the wrists, or the shoulders; single decorated feathers, generally worn in the hair, or held in the hand; and single or grouped feathers as fringes or pendants. Occasionally, also, scalps of woodpeckers were used, glued on a strip of buckskin.

Feather bands were in this section, as a rule, single (see Figs. 84, 85, 86, and 87), and were made in quite a different manner from those in use among the Maidu. The technique of the attachment of the feathers is shown in Fig. 83. These bands, as used for young girls in the puberty dance, were made of bluejay-feathers (Fig. 84), and formed a strip from ten to fifteen centimetres wide. The wrist-bands (Figs. 86, 87), made usually, on the other hand, of yellowhammer-feathers, were narrower, sometimes with the addition of one or two bits of down, as in Fig. 89. The shoulder-bands (see Fig. 85) also were of yellowhammer-feathers.

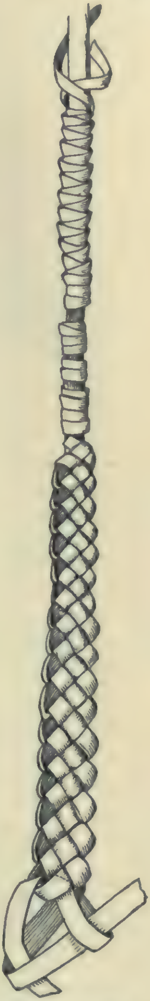


Fig. 81 ($\frac{50}{3175}$). Detail of Fringe on Woman's Apron, Fig. 92.

The single decorated feathers (Fig. 88) consisted of a single long feather cut on either side in zigzags, about the base of which, and sometimes extending up for fully half the length of the feather, was a mass of soft fluffy feathers.

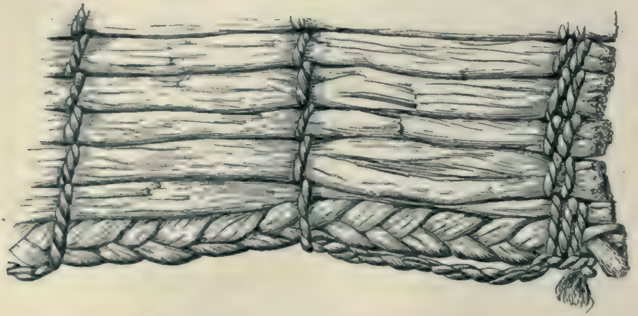


Fig. 82 ($\frac{50}{3210}$). Detail of Mat, Plate LXXI.

In addition to the types of feather ornaments and featherwork above described, there were others in which feathers constituted but a portion of the decoration, as, for instance, on the head-bands worn by shamans. In these, the uses of the feather are, (1) erect feathers attached to the base of the head-band, (2) pendant feathers or feather tassels, and (3) stiff feather pompons.

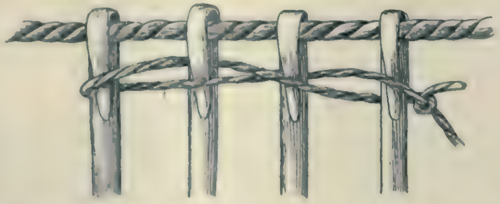


Fig. 83 ($\frac{80}{681}$). Detail of Feather Attachment on Feather Band, Fig. 84.

An example of the first is shown in Fig. 89. These are fastened in position by two cords which pass through the head-band,—one through the quill near the end, the other around, just below the web. Pendant feathers were used singly (attached to the ends of lines, or at intervals along a

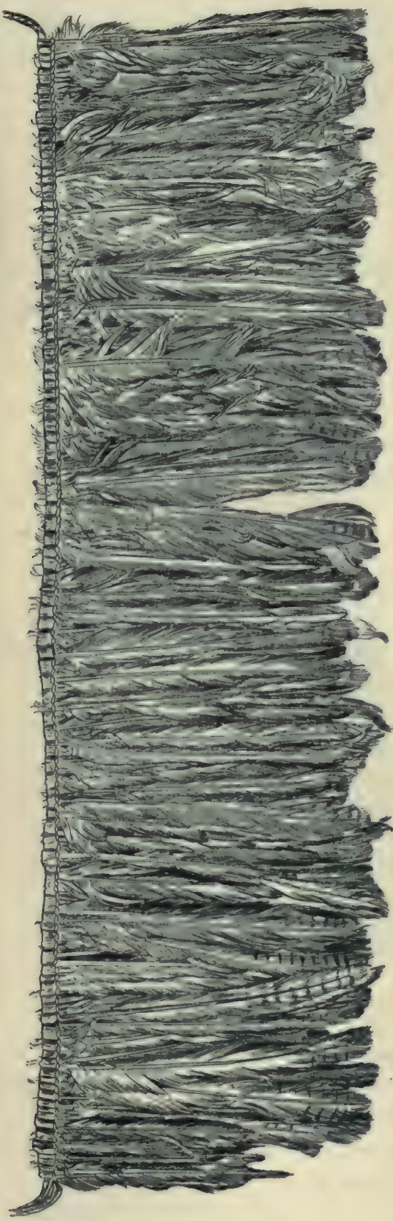


Fig. 84 ($\frac{50}{1181}$). Feather Band used in Puberty Dance. Length, 43 cm.

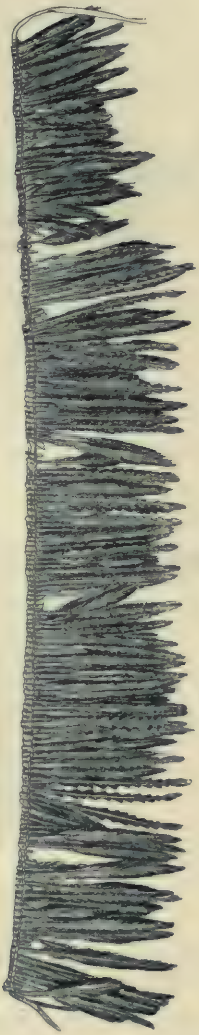


Fig. 85 ($\frac{50}{3180}$). Feather Band. Length, 84 cm.

line) or in groups, forming what might be called tassels (Fig. 90). In many cases a feather, or more commonly two feathers, out of a group, and also single pendant feathers, had down or a small bit of fluffy feather attached to their bases. Both feathers and down were attached to the line by winding with thread.

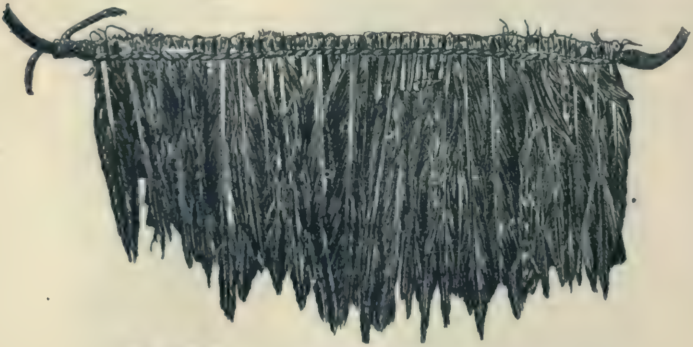


Fig. 86 ($\frac{50}{1788}$ A). Wrist-band, Plain. Length, 16 cm.

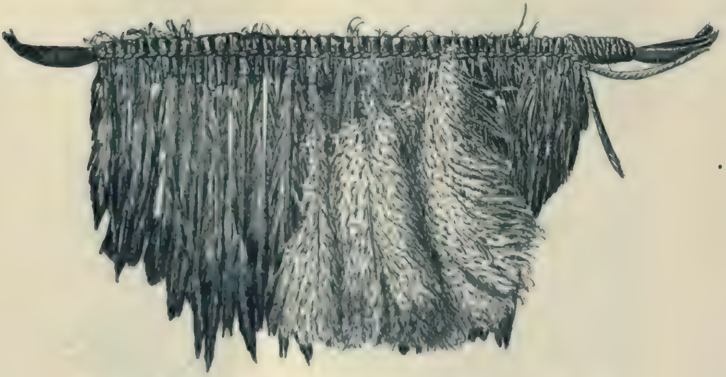


Fig. 87 ($\frac{50}{1788}$ B). Wrist-band Decorated with Down. Length, 16 cm.

Stiff pompons were made usually of yellowhammer-feathers. The feathers were attached to a cord, as shown in Fig. 83, and the resulting feather strip tightly coiled on itself, forming a brush-like pompon, which was affixed in a horizontal position to the middle of the forehead-band, as shown in Fig. 91.

Clothing and Personal Adornment. — The clothing in use by the Shasta was apparently more elaborate than that in use among the Indians of Central California, and it approximated the type worn by the Hupa and other Indians of the lower Klamath. There would seem to have been a little variation in their dress, although the differences were very slight.

The men's costume consisted of moccasins, leggings, breech-clout, and, at times, a shirt. The moccasins were of buckskin, sewed with a single straight seam up the front, and had a heavy outer sole of bear or elk hide. The winter moccasin differed from the summer one in having the buckskin cut out on the sole, the bear-hide outer sole having the fur left on, and this, being turned inside, brought the foot in direct contact with the warm fur. In other cases, the winter

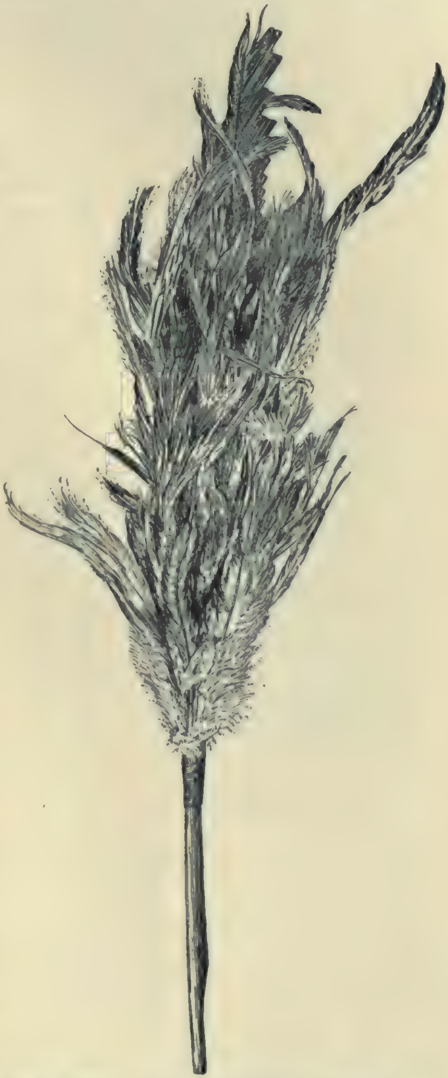


Fig. 88 ($\frac{50}{1817}$ A). Feather Ornament. Height, 50 cm.

moccasins were simply made larger than those worn in summer, and the foot was kept warm by wrapping with squirrel or wildcat skins, or by stuffing the moccasin with the long black moss that hangs from the trees. The seams of moccasins were often painted red. The leggings, which were of buckskin, reached, so it is said, from the ankle to the hip, and were held up by a belt passing through straps or loops at their upper end. The leggings were often fringed and beaded by the more wealthy. The shirt seems to have been often little more than a deerskin thrown over the shoulders, although it is declared that a regular shirt of dressed buckskin, with short sleeves, was sometimes worn. These shirts also had fringe at the seams. During the summer, at least, the men went without any covering for the head.

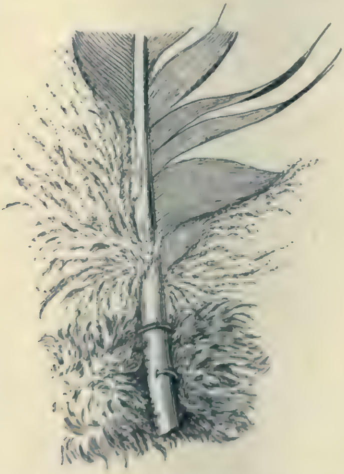


Fig. 89 ($\frac{50}{4893}$). Erect Feather Attachment.

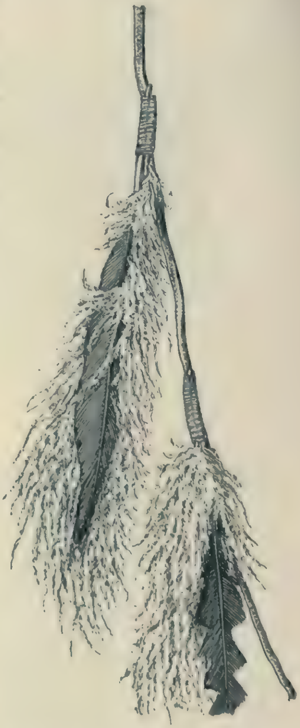


Fig. 90 ($\frac{50}{4898}$). Detail of Feather Tassels.

The women's dress, as formerly worn, is described as consisting of moccasins; two buckskin skirts; a seed, pine-nut, or grass apron; a sleeveless shirt; and a basket-cap. The moccasins were similar to those worn by the men. The buckskin skirts were of two types, one (being plain) consisting of a simple buckskin wrapped around the loins from in front, and meeting, or nearly meeting, behind. The other skirt was of buckskin, deeply fringed on both sides, the fringe being covered, as a rule, with braided grass-work, and having shell pendants, beads, pine-nuts, etc., attached in profusion. This ornamental skirt was doubled or folded, and put on from behind, and met, or nearly met, in front, and was worn over the simple, plain skirt which meets at the back. These two skirts are very similar to (almost identical, in fact, with) those worn by the Hupa and other lower Klamath Indians. In wealth of ornamentation, however, the Shasta skirts, as a rule, fell behind those from nearer the sea. Of course, these elaborate skirts were not worn by the women constantly, but were donned for special occasions only. In addition to these two buckskin skirts, the women are said also to have worn a third garment (in the form of a narrow apron) filling the space, or covering it, where the ornamental back-skirt comes together in front. These aprons (Fig. 92) were made simply of long fringes filled with pine-nuts or other seeds, the fringe-strands being also often covered with the characteristic braided covering of grass.[1] These aprons were sometimes double, as in the figure, one being worn in front and one behind, with no other clothing. By the poorer people, or in summer-time, a simple grass

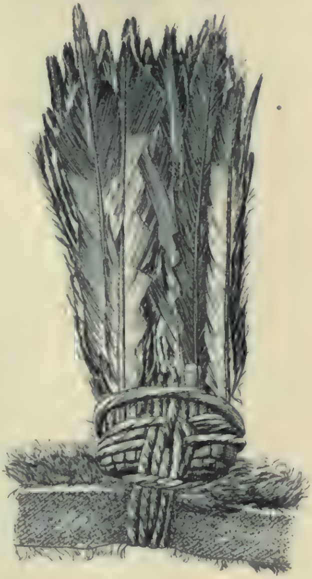


Fig. 91 ($\frac{50}{4075}$). Detail of Feather Pompon. Height, 12 cm.

---

[1] Goddard, op. cit., Plate 8.

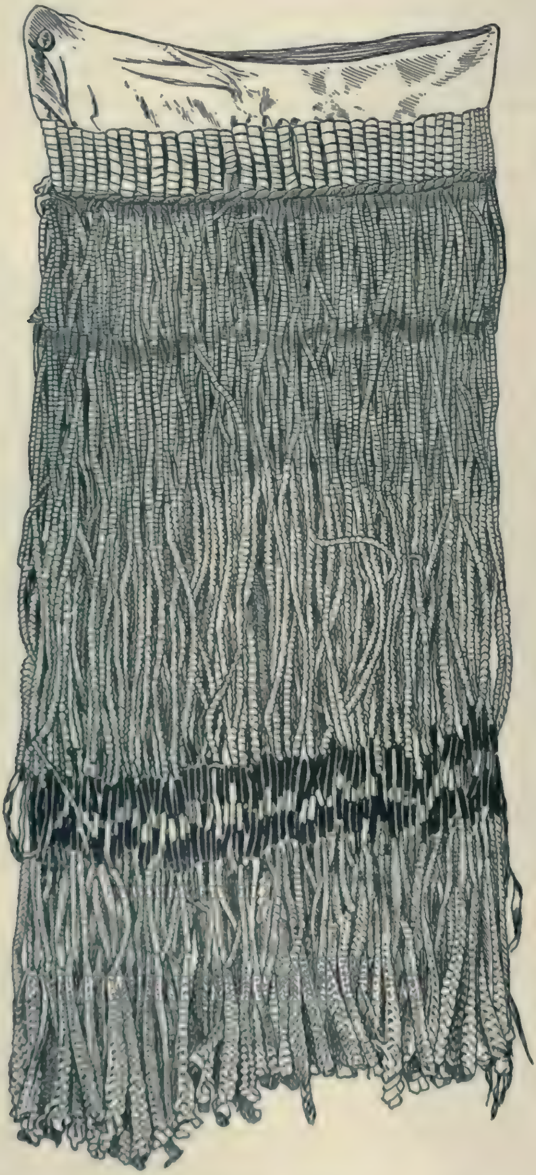


Fig. 92 ([illegible]). Woman's Apron. Length, 50 cm.; width, 24 cm.

fringe was worn in this same way. The shirt, or upper garment, seems to have been much like the men's, except for the lack of sleeves. It was not commonly worn. The basket-cap was constantly worn. It was of the hemispherical shape, similar to those of the Indians of the lower Klamath.[1] Those made by the Shasta themselves were simpler and cruder than those obtained from the down-river people, and for the most part the Shasta relied on caps obtained from them in trade.

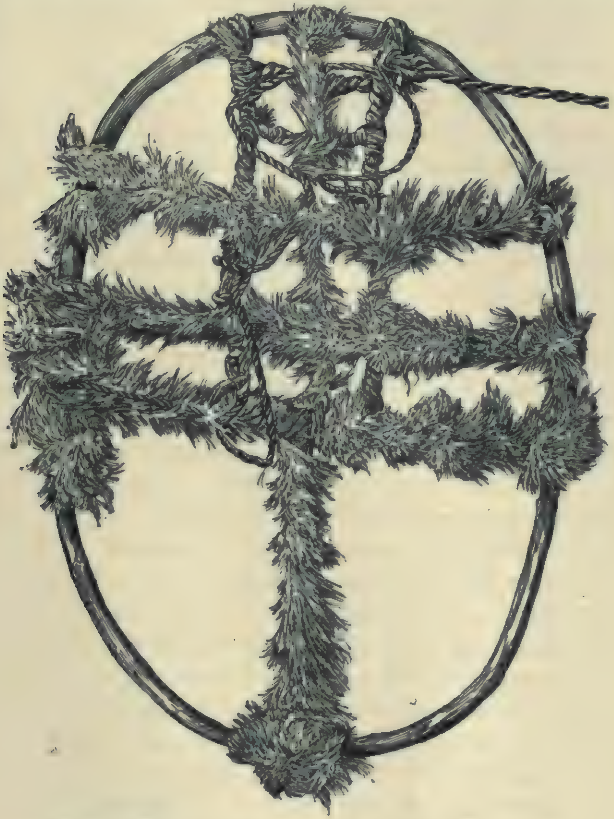


Fig. 93 (1881). Snow-shoe. Length, 48 cm.; width, 35 cm.

---

[1] Goddard, op. cit., Plates 5, 15, 75, 76.

The hair of the men was allowed to grow long, and, as a rule, was gathered on top of the head, and fastened there by means of a long bone pin. At other times, it was allowed to hang loose. The women, on the other hand, gathered the hair in a queue at each ear, and wrapped or tied it with buckskin or fur string, allowing the two queues to hang down in front of the shoulders.

Snow-shoes (Fig. 93) were worn by the Shasta in winter, to a considerable extent. These were usually made, it seems, of deer-hide with the hair left on, and differed in the stringing from those of the Maidu. The shoes used by the Shasta had three transverse thongs, with three running at right angles to these, only one of which, however, continued all the way across the shoe, the other two being attached to the three cross-thongs.

Body decoration among the Shasta was not much developed. Painting was but little used, except by shamans and by those who were going to war. Red, blue, yellow, white, and black were used for these occasions, the two latter colors being those most used in war. The colored paints were obtained mainly from different clays or earths in various parts of the territory occupied by the stock, although a red paint was also obtained from a species of fungus growing on fir-trees, and a yellow from the spores of a species of puff-ball, and also from the pollen of the hazel, pine, etc. The paints were applied with the finger, and chiefly to the upper parts of the body, in dots and lines, or solid masses.

Tattooing as a means of decoration was confined practically to the women. The ornamentation was applied to the chin only, and consisted of three broad vertical marks. In some cases, narrower lines were put in between the broad ones, or the outer lines were prolonged slightly above the corners of the mouth. Notched or saw-tooth lines were not used, nor were lines ever made on the cheeks or forehead. The tattooing was done when the girl was about ten or twelve years of age. The instrument used was a small, sharp flake of obsidian. The operator was in all cases an old woman who made tattooing her regular trade, and who was paid for the work, when done, by the father of the girl. With the sharp flake, shallow parallel cuts were made close together, and then the coloring-material, either charcoal or blue-clay, was rubbed in. The whole chin was tattooed at once, and, unless the lines were not dark enough, was not gone over again. Throughout the night on which the tattooing was done, the girl was not allowed to sleep much, and whatever she dreamed was bound to come true. Her dreams were always told to her mother. Men generally had a few short lines tattooed on their hands and arms, not for decoration, but to serve as measures for dentalia, beads, etc.

Ornaments worn consisted chiefly of beads and shells. The common disk-shaped white bead and small shells were much used for necklaces, ear-pendants, etc. Abalone was also used to some extent, although not as commonly as lower down the river. Pine-nuts were often used for necklaces, as in Fig. 94. Feathers were occasionally stuck in the ears and nose (perforated for that purpose), or long dentalia were worn sometimes in the latter orifice, and pendant in groups from the ears.

A peculiar type of belt (Fig. 95) was worn by women at times. The belt is formed of a coil of fine hair braids. Formerly these were of human hair, but now they are usually of horsehair. This coil is flattened in the central portion, and held in this position by a zigzag intertwining of narrow buckskin thongs. At the ends, the coil is gathered into a round loop, closely wound, and beaded. To the belt are attached abalone disks or pendants, small shells, beads, or elk-teeth. My informant was not clear as to the early uses of such belts, which now seem to be worn chiefly for ornament; but it is not unlikely that in origin they were similar to the mourning-belts made by the Achomā'wi widows or widowers, of the hair cut off in mourning.

Dwellings and Household Utensils. — The Shasta were accustomed to build two sorts of houses, differing considerably in construction and use. These were the dwelling-house (ŭ'mma) and the sweat or big house (ō'kwa'ŭmma). The dwelling house was occupied only during the winter months,

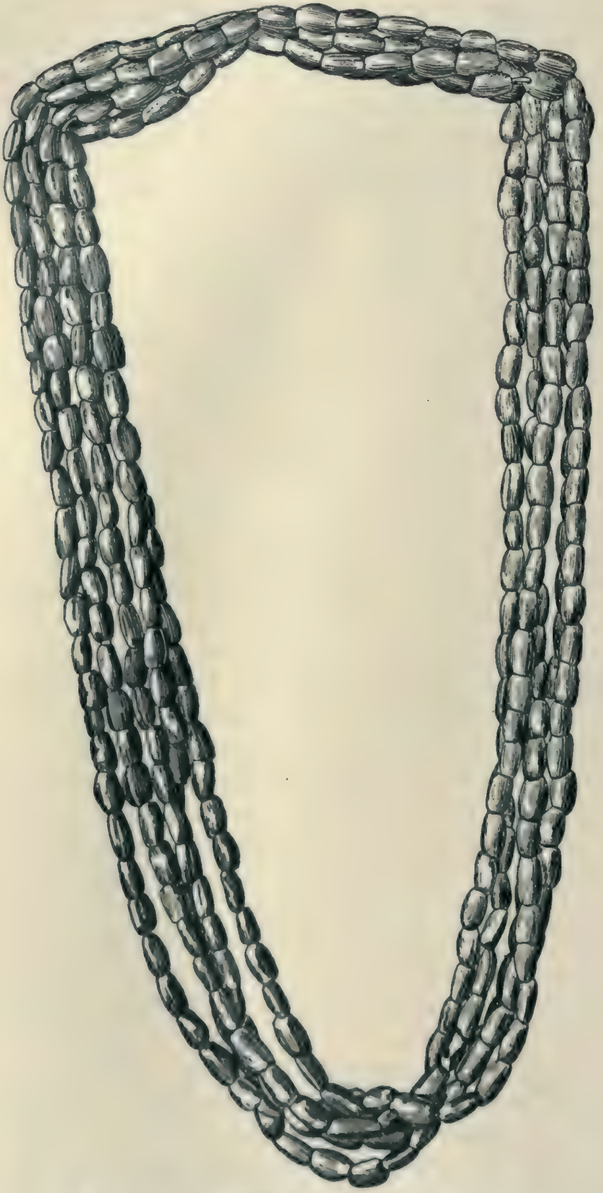


Fig. 94 ($\frac{50}{881}$). Necklace of Pine-nuts. Length, 54 cm.

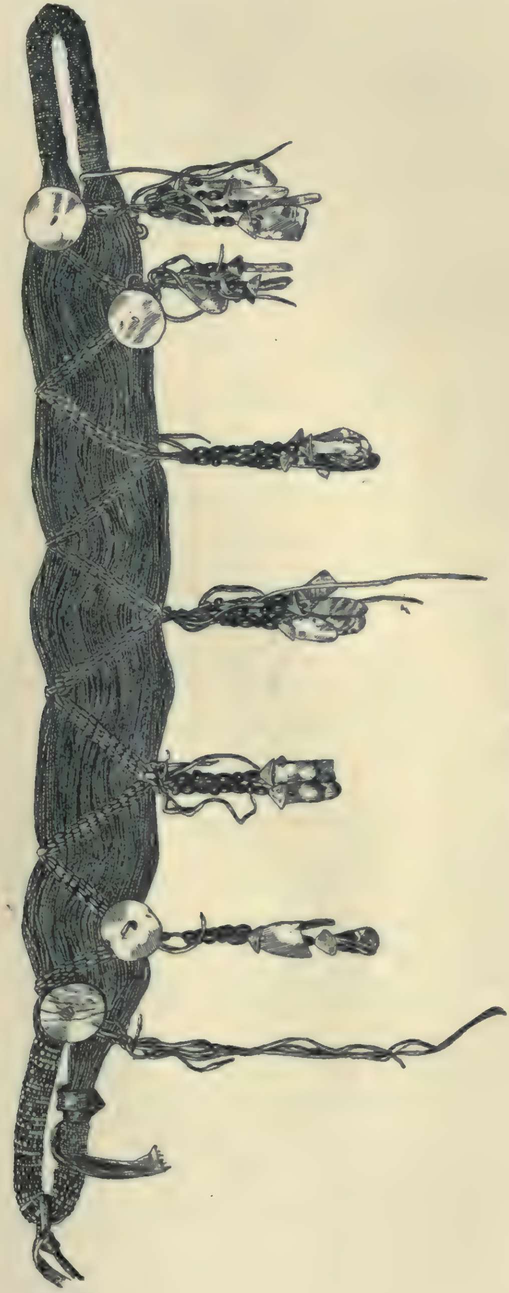


Fig. 95 ($\frac{50}{1880}$). Woman's Belt. Length, 80 cm.

being abandoned for the brush shelter (k!ūpixasai′duk) in the summer. None of the old type of either the dwelling-house or sweat-house now remain, and the following description is based entirely on accounts and partial models.

In the construction of the dwelling-house (Fig. 96) an excavation was first made, generally rectangular or slightly oval, averaging about five metres by six or seven, with a depth of not over one metre at the outside. At either end of the excavation a pair of forked posts (*a*, *b* and *b*, *b′*) were set up, the posts being from four to five metres high, and set just inside the wall of the excavation. Then, in each corner of the pit, single forked posts (*c*, *d*, *e*, *f*) were set, these posts being only from a metre to a metre and a half in height, and also set just inside the wall. From *a* to *b* and from *b* to *b′*, two parallel ridge-poles were then run, and likewise a pole from *c* to *f* and from *d* to *e;* these latter side-poles being but about half a metre above the edge of the excavation. The earth dug out in making the pit was next piled up along the edges of the pit, forming a wall, which extended up to the side-poles just mentioned. The walls of the excavation were next covered by slabs of cedar-bark set vertically on edge all around the sides, and reaching from the ground

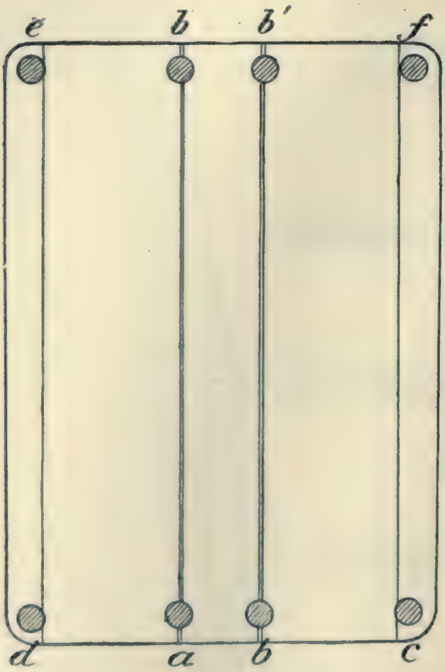


Fig. 96. Plan of a House.

to the side-poles. Finally the roof was put on, consisting of cedar or sugar-pine boards (split out with wedges) running from the side-poles to the two ridge-poles. The roof-boards met in a peak between the two ridge-poles, except for a space in the centre, where a smoke-hole was left. They also often extended a little beyond the side-poles, forming eaves, which protected the earthen walls. Sometimes the construction differed in that a side-wall of boards was first laid from the ground to the side-poles, and the earth from the excavation piled against this, the roof then being put on as just described. The ends of the house were formed by setting boards on end, almost vertically. Between the two posts (*b*, *b′*) holding up the two ridge-poles at one end of the house, a cross-bar was firmly tied with grape-vine, about a metre or a little more above the level of the ground outside; and on this cross-bar the lower ends of the boards forming the end-wall between the two posts rested. The boards forming the end-walls were firmly tied to the posts, as were also the ridge and side poles. The space below the cross-bar formed the door. The opening was usually closed by a heavy mat of rushes hanging from the cross-bar. It was quite common, apparently, to have the ridge and side poles project from a metre to a metre and a half beyond the end-wall of the house, at the end where the door was situated. On these the roof was extended and a second rough end-wall built, forming in this way a sort of "storm-porch," to which the entrance was always at the extreme corner, and unprovided with any mat or other means of closing. By placing the outer door at the corner thus, all direct draught into the house was stopped. This porch served to keep out cold and wind, and also formed a convenient storehouse for firewood, nets, spears, etc. Inside the inner door, a further protection was erected against draughts, by setting up boards on end to form two parallel walls reaching from the ground to the roof, and extending out from the doorway on either side, a metre or more, toward the centre of the house.

In the centre of the house-floor, which was of beaten earth, was the fireplace, — a circular area a metre or so in diameter, sunk from fifteen to twenty centimetres below the general level, and rimmed with stones. Around the sides of the house were the sleeping-places. For these, the ground was first levelled and stamped. A thick layer of pine-needles was then laid down, and on this mats were spread. This sleeping and lounging place extended back from the fire, on all four sides, to within half a metre of the walls of the house. At this point, a heavy board, about fifty centimetres in width, was set up on edge, and held in position by stakes. The space between this board and the wall formed thus a sort of "manger" at the head of a person lying feet to the fire; and in this place each person kept his or her personal property in the way of clothing, food, etc. A vertical section of a house is shown in Fig. 97, and will illustrate the position of this storage-place.

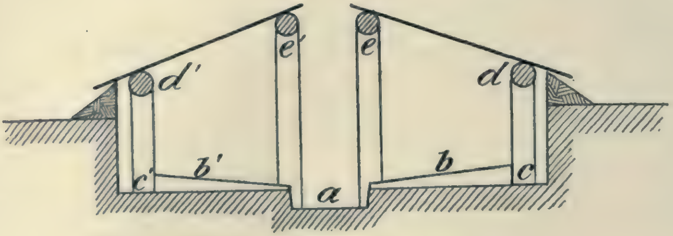


Fig. 97. Vertical Section of a House.

The dwelling-house was often occupied by more than one family; but, when this was the case, the families were always closely related, and each occupied one side or portion of the house. The only furniture in the house consisted of pillows, formed of wooden blocks slightly hollowed out on top, and apparently closely similar to those described by Goddard as in use among the Hupa.[1] Stools, consisting simply of a block of wood of variable size and form, were also in use.

The sweat-house — variously known as "big-house," "dance-house," and "sweat-house" — was somewhat differently built. The excavation made for this type of house was larger and deeper, being, as a rule, from six to eight metres wide, and ten or twelve long, with a depth of about two metres. At each corner of the excavation, forked posts were set up, as in the ŭ′mma; but, in place of the two pairs of posts supporting the two ridge-poles, in the latter case a single very heavy post (about four metres long) was set at each end of the pit, and a third post placed in the middle of the house. A single ridge-pole was then laid on these three posts, and the side-poles arranged as before. As in the case of the ŭ′mma, cedar-bark was used to face the walls of the pit, and the roof was made of boards, but in this case had very much less pitch than in the dwelling-house, being in fact, in some instances, almost flat, the corner-posts being higher proportionally to the centre-posts than in the case of the dwelling-house. The roof being completed, a layer of pine-needles was laid on it, and then earth spread over the whole, except at the smoke-hole, to a depth of fifteen or twenty centimetres. The end-walls of the structure were made as in the dwelling-house, except that both ends were alike, there being no cross-bar at the door-end. The door was in this case formed by cutting out a hole in one of the end-planks, the hole being either round or square and usually not over sixty or seventy centimetres in diameter. This doorway opened one side or the other of the heavy post supporting the ridge-pole; and a ladder, consisting of a notched madrone-log, led very steeply down from this door to the floor of the house. Under this ladder, and between it and the wall, fire-wood was often stacked. The door-opening was closed by a sliding board on the inside. The smoke-hole also could be closed quite tightly by sliding a board over it, by means of a pole. In the centre of the house, on the farther side of the central post (which is usually a little nearer the door than the exact centre of the house), was the fireplace, made like that in the dwelling-house. Often the whole floor of the house was floored with split boards, while in other cases the floor was simply of stamped or even of baked clay.

---

[1] Goddard, op. cit., p. 17.

The sweat-house was built only where there was a village of several families, and was constructed by the common labor of all. When completed, it belonged to the head man of the village, although all men who aided in the building had certain rights in it. The leader or chief never lived in the ō′kwa'ŭmma, except that, if a large gathering of people took place for any reason, he might temporarily vacate his own dwelling-house for the use of the guests, and take up his quarters for the time being in the sweat-house. So far as has been ascertained, there were no important ceremonies connected with the construction of the structure. It was used for gatherings of various sorts, gambling, etc., but chiefly as a general place of resort for the men of the village, they using it as a regular sleeping-place throughout the winter, only the women and children occupying the dwelling-house. In the making of the fire in this building, oak was chiefly used. When it was reduced to a bed of coals, the smoke-hole would be closed, and ashes raked over the fire; and then all the inmates slept naked, owing to the high temperature. In case of the death of a village head man, if he left no brothers or children to inherit the house, the sweat-house was burned.

Sudatories proper were small affairs, roughly hemispherical in form, built of willow poles planted in the ground, bent over, and tied. Yellow-pine bark slabs were set up on edge outside, forming walls, and the remainder of the structure was covered over with skins. An opening just large enough to crawl through was left on one side. These sudatories were usually family property, and were located near the edge of a stream.

Menstrual lodges were in construction and shape like the dwelling-house, but small, and very roughly made, accommodating at most two or three persons at one time. The summer brush-shelter was little more than a fence of brush, three or four metres high, with no roof or cover of any description. It was roughly circular in outline, and had two openings at opposite sides.

It will readily be seen from the above descriptions, that the houses of the Shasta were, as compared with those of the Indians of Central California (of which the Maidu may be taken as an example), of radically different construction.

There is no trace here of the circular type, with its radial rafters and entrance-porch; and, moreover, the functions of the sweat-house (ō′kwa'ŭmma) among the Shasta are quite unlike those of the dance-house (kum) of the Maidu, for example; for in the latter case the primary use of the structure is ceremonial, and it is only secondarily a general lounging and sleeping place for the men. The Shasta house-types, on the other hand, resemble far more those of the Indians of the lower Klamath and Trinity (the Karok, Yurok, and Hupa), who are the representatives of the culture of Northwestern California in its best developed form. With these, however, the agreement is not complete.[1] It is close enough, however, to lead us to regard the Shasta, in so far as their houses are concerned, as allied rather to this Northwestern than to the Central Californian culture.

The dwelling and sweat houses were occupied, as a rule, only for about five months in the year. In the spring, when certain plants had grown to a certain height, these winter houses were abandoned, and all the people went up into the mountains, and lived during the summer in the open, roofless brush-shelters. When, in the fall, the berries had been picked and dried, and a supply of dried venison laid in for the winter, they returned to the villages (left in charge, usually, of a few old persons), cleaned out the houses, and settled down for the winter again.

The sites chosen for villages were generally on the banks of streams. Along the Klamath, the position most favored was at the mouth of some small creek coming into the main river, and forming a small flat or delta. In Scott and Shasta Valleys, the villages were usually at the edge of the valley, near the base of the hills, where a small stream came down out of the mountains.

The size of the villages would seem to have been, on the whole, small. Many of the settlements along the Klamath, for example, consisted of not more than two or three families, and there were but few villages here of any size. The Shasta and Scott Valley settlements may, perhaps, have been somewhat larger, although it is difficult to secure any definite information on this point. Gibbs's estimate of sixty persons as the average in a village is, I believe, a little too large.

---

[1] Goddard, op. cit., pp. 13–18.

The interior furnishing of the houses has already been referred to, and it only remains to speak of the varieties of baskets and other household utensils. For storage of acorns and dried meat, large baskets, conical in shape and of open-work structure, were much used (Plate LXIX). The basket was first lined with a mat or layer of maple-leaves, made by weaving the long stems of the leaves through the leaves and tying them, in this manner forming an even, almost water-tight, lining. Dried salmon in powdered form was kept, as were also the powdered bones, in deep baskets of tule with a tight-fitting cover. These baskets, or soft sacks, were cylindrical, and have now gone entirely out of use. Deer-fat was also kept in similar baskets.

For cooking, globular baskets were chiefly in use, although a more conical shape was occasionally employed. As a rule, the only sort of platter-baskets in use were the open-work ones (Plates LXVIII, Fig. 1, and LXX, Fig. 2); these being in use for meat and fish. Burden-baskets were usually of the open-work type (Plate LXIX). In the manufacture of acorn-meal, the milling-basket (Plates LXIII, LXVI) was generally used. The meal was sifted on a platter-basket or tray like that figured by Goddard.[1] The brush used to brush off the fine meal from the tray (Fig. 98) was made of the soaproot-fibre (*Chlorogallum pomeridianum* Kunth), but was different in form from the brushes used by the Maidu, for example.[2] The Shasta used, in the stirring of their acorn-soup, a mush-paddle somewhat like those used by the Indians lower down the river,[3] but less carefully made, and with but little ornamentation in the way of carving.

In fire-making, the simple fire-drill (Fig. 99) was in use, essentially similar to that used by most of the Californian peoples.

---

[1] Goddard, op. cit., Plate 24, Fig. 2.

[2] See p. 185, Fig. 46 *b*, of this volume.

[3] Goddard, op. cit., p. 29, Fig. 3.

FOOD AND ITS PREPARATION. — The food-supply of the Shasta was abundant and varied. Although depending on the acorn to a large extent, other foods, in particular salmon, played proportionally a greater part here than among the Maidu and other Central Californian peoples, but not as great, on the whole, as among the Indians of the lower Klamath.

The acorns of most of the species of oaks growing in the region were eaten. Some were, however, much preferred to others, the order of preference being black oak (*Quercus californica* Cooper), white oak (*Quercus Garryana* Dougl.), and live-oak (*Quercus chrysolepis* Liebm.). The acorns of the tan oak (*Quercus densiflora* Hook. and Arn.), growing only in quantity farther down the Klamath River than the section occupied by the Shasta, were, however, by many considered superior to any of the local species. Besides acorns, several other varieties of nuts were used for food. Pine-nuts from the digger-pine (*Pinus Sabiniana* Dougl.), the sugar-pine (*Pinus Lambertiana* Dougl.), and the yellow pine (*Pinus ponderosa* Dougl.), were always in demand; and hazel-nuts (*Corylus rostrata* Ait., var. *californica* A. D. C.) were gathered in considerable quantities in the mountains.

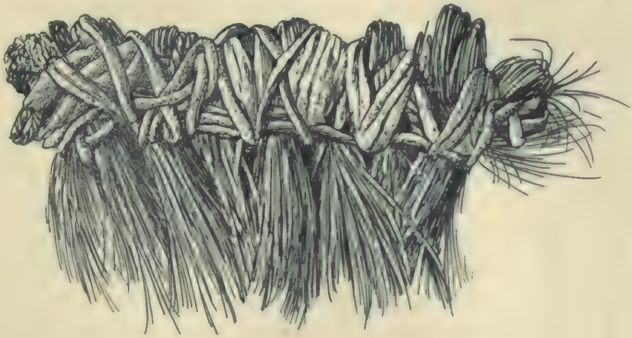


Fig. 98 ($\frac{50}{3188}$). Meal-brush. Length, 12 cm.

Berries and fruits were in abundance. Manzanita-berries (*Arctostaphylos Manzanita* Parry) grew in great quantities and were used to make the well-known "manzanita-cider." Blackberries (*Rubus vitifolius* C. and S.?), service-berries (*Amelanchier pallida* Greene), elderberries (*Sambucus glauca* Nutt.), gooseberries (*Ribes* sp.), thimbleberries (*Rubus glaucifolius* Greene), choke-cherries (*Prunus demissa* Walpers), the fruit of the sumach (*Rhus trilobata* Nutt., var. *quinata* Jepson), and a number of other fruits and berries as yet unidentified, were eaten either fresh or dried.

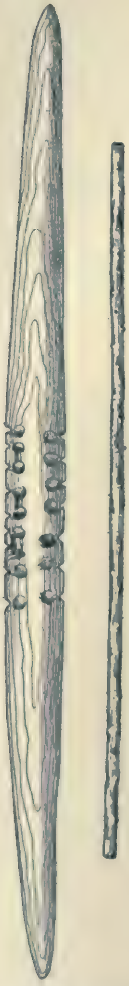


Fig. 99 (1/88 A-B). Fire-drill. Length of hearth, 62 cm.

Roots and bulbs seem to have formed a rather smaller portion of the food-supply here than in the central part of the State, although camass (*Camassia esculenta* Lindl.) and "ipos" (*Calochortus* sp.), with one or two other roots and bulbs, were eaten to a considerable extent.

Seeds of several varieties were eaten, and the Shasta were fond of a number of sorts of "greens." The gum of the milkweed (*Asclepias cordifolia* Benth.?) was chewed, and the thin inner bark of the yellow pine was scraped off with bone scrapers, and eaten in the spring. The sugar from the sugar-pine was also sparingly eaten. No teas or aromatic infusions seem to have been used.

Although salmon formed a large part of the food-supply of the Shasta, game of various sorts was also a considerable factor. The mountains abounded in deer and elk; the Rocky Mountain sheep was found here and there; and in the more open sections, such as Shasta Valley, antelope were plenty. Bears were hunted for food, and were quite numerous throughout the area. The mountain-lion and wild-cat were also eaten, and small game — such as rabbits, squirrels, etc. — was abundant. Coyotes, dogs, and snakes were not eaten. Birds, in particular ducks and geese, were abundant in places, and much sought for. Angle-worms, grasshoppers, and locusts do not seem to have been eaten to any extent.

Of fish, the salmon was by far the most important, all varieties which frequented the rivers being eaten. Trout, suckers, and eels were also in demand, as well as crawfish and turtles. Mussels were not to be had in any large quantity, but were relished when procurable. The bones of salmon and also of the deer were pounded fine, and used considerably for food.

The gathering and preparation of acorns as practised by the Shasta followed practically the same lines as among the Maidu. Inasmuch as these operations have been fully described in treating of that stock,[1] only such features of the work as differ among the Shasta need be discussed here. The acorns of the black oak were gathered, cracked, hulled, and dried in practically the same manner as among the Maidu. The thin membrane covering the meat of the nut was then rubbed off with the hand, and the meats then reduced to meal; the chief difference in this latter process here being the almost universal use of the mortar-basket. As in the case of the Maidu, only flat stones appear to have been used to pound on. In winnowing the meal and sifting it, it was held on a flat platter or tray basket held at an angle, and shaken with the right hand. The extraction of the bitter principle followed slightly different lines. The woman prepared a small scaffold or platform of sticks (some fifteen to thirty centimetres above the ground) resting either on forked sticks or on stones. On this a layer of pine-needles was placed, followed by a layer of sand, made thicker at the edges to form a basin. The meal, in a layer about five centimetres thick, was spread over this, and warm water poured on, as in the region of Central California. When completely leached, the meal was allowed to drain for a time, and then the hand was slapped down on the wet dough, which adhered to the hand as it was lifted. The sand was next carefully washed off of the under side of the piece of dough by putting hand and all into a basket full of warm water, and then the cleaned sweet dough was put into another basket with water, and was ready for the final cooking. Where the acorns were plenty, the dough, after cleaning, was often dried, and in that form traded to other villages where the acorn-crop was not so plentiful. It is said that this dried acorn-paste formed a considerable article of trade with the Rogue River people in Oregon.

---

[1] See pp. 184–187 of this volume.

Acorn-soup was made here precisely as among the Maidu; except that a more or less ornamental mush-paddle, about sixty centimetres in length, was used to stir it with. The stones used for cooking were, as a rule, of a porphyritic or close-grained igneous rock, selected because it did not splinter or disintegrate when heated and suddenly cooled. The acorn-bread of the Shasta differed from that of the Maidu in that it was made into small cakes, and baked on a flat rock slanted up in front of the fire. These cakes were, moreover, generally eaten with salt.

The acorns of the white oak were prepared and cooked in the same manner as those of the black oak; but they made a more slimy, glutinous mixture, which was not as well liked. Live-oak acorns were prepared by being buried whole in the mud for some weeks, till they turned black. They were then dug up, cracked, and boiled whole, without being made into meal. They were also sometimes roasted in the ashes without any preliminary burying or boiling.

Manzanita-berries were crushed, and used to make manzanita-cider in a manner similar to that described among the Maidu.[1] The winnowed meal was also mixed with the acorn-meal in making a special variety of the acorn-soup. Sugar-pine nuts were steamed in an earthen oven. This was made by digging a hole, building a fire in it and heating stones. The fire was then raked out, some of the hot stones put in, and the nuts, wrapped in leaves, were laid thereon. Water was then poured in, more hot stones placed on top, and finally earth laid over the whole, which was allowed to steam for several hours. The nuts were then dried, and stored for use. When wanted, they were pounded fine, winnowed, and made into small cakes. Powdered pine-nuts prepared in this manner were also often mixed with the powdered salmon. Service-berries and several other sorts of berries were dried, and kept for winter use.

---

[1] See p. 189 of this volume.

Salmon was prepared in much the same way as among the Maidu. The fish were split, and held open by a small twig thrust through the fish, and in this shape smoked and dried. The bones were then removed, and the dried fish rubbed to powder between the hands. In this form it was packed in leaf-lined baskets, and stored. It was eaten dry, with a spoon. Another common method of preparing salmon was to skin the fish, leaving a layer of meat (about a centimetre in thickness) adhering to the skin. A slice of clear meat was then taken off each side of the fish, leaving the backbone and the rest of the meat as a residue. The skin, the slices of clear meat, and the backbone-piece were then dried and smoked separately; the slices being kept in that form, without powdering, in ordinary baskets, without any leaf-lining. In cutting up salmon for immediate use, a cut was first made from the vent, completely around the body, severing the tail. Then a second cut was made, along both sides of the fish from tail to head, following the line on the fish's skin, thus separating the belly portion from the back; but these regulations did not apply to the dog-salmon, however. Salmon-heads were crushed, and made into cakes, which were used as a concentrated food on hunting-trips in winter.

Deer and bear meat was dried, the deer-bones being pounded up for use in making soup in the winter-time. Salt was regarded as a luxury, and was obtained chiefly from the tribes of the lower Klamath.

Meat was cooked by boiling or roasting. Bear-meat was dried somewhat differently from deer-meat, being cut into long strips, cooked in boiling water, and then dried. In such cases, the whole animal was generally rolled on to the fire, to singe off the fur before being cut up. In other cases, the bear would be skinned, leaving all the fat possible on the hide.

Ropes or sticks were then fastened to the hide (to the legs and sides, each man holding a rope or stick), and the hide was held over the fire. As the hair burned off, the hide began to shrink; then, when all the hair was gone, the hide was cut up, each person who held a rope getting a share. The skin and fat adhering were then roasted, and eaten. Grizzly-bear meat when eaten must never be tossed from one person to another, but carefully handed about. Failure to do this would lead to the offender being attacked by grizzlies.

HUNTING AND FISHING. — Salmon were caught by weirs, by nets, and by a sort of driving. The fish weir or dam was constructed always in a shallow, gravelly spot. A row of stakes was driven, slanting slightly down-stream; the stakes being set pretty close together. At water-level, a horizontal pole was tied firmly to the stakes with withes, being placed on the up-stream side. This horizontal pole was then guyed at either end, up-stream to the shore, by long grape-vines. Brush was then laid on the stakes on the up-stream side, and weighted with stones at the bottom. Here and there openings were left, and in these, long willow fish-traps were placed. Sometimes, where a stream was very swift, cribs weighted with stones were built on the down-stream side, in the centre, for additional support. Large dams of this character were few in number, there having been, it is said, but three on the Klamath River, within Shasta territory. One of these was at the mouth of Shasta River, one at Scott River, and one at Happy Camp. Each belonged to one or two men. Any one, however, could come and spear fish at such a dam, and the owners were obliged to give to any one who asked for them as many fish as he could carry.

The net used mainly by the Shasta was a very ingenious one, and was much used also by the other Indians of this whole region, and it is still used to-day. A point in the river is first selected, where there is a strong eddy, in which the salmon are likely to rest as they ascend the stream. A platform is then built out from the bank, raised about a metre from the water-level. Three straight, slender poles are next prepared, and tied together to form an isosceles triangle, as shown in Fig. 100. A second cross-bar (*gh*) is then attached, the distance between *h* and *f* being equal to the height of the man's waist from the ground. Generally a third cross-piece (*ij*) is added for further strength. A net in the form of a conical bag is then firmly tied to *ef* and *gh* and to the portions of *ab* and *cd* between these. At *x*, a strong loop of grape-vine is attached to the pole *ab*, this loop being arranged to slide up and down on a vertical pole (Fig. 101, *y*) set up at one side of the platform. This pole is cut off at such a height that,

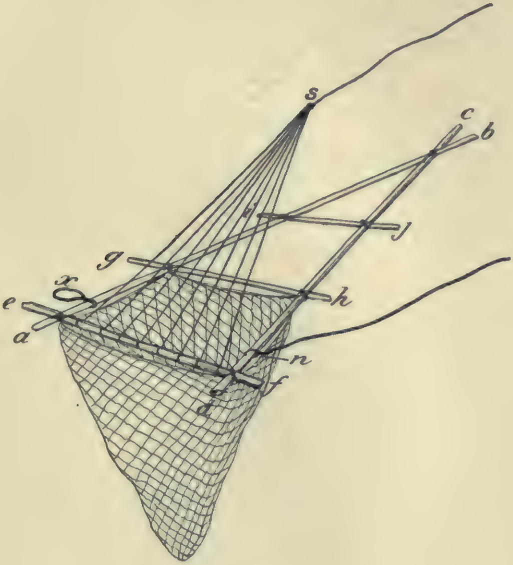


Fig. 100. Fishing-net.

when the man stands on the platform and takes the net-frame by the cross-bar *ij*, raising the bar as high as his waist, the loop slides off the top of the pole, thus enabling the fisherman to lift the whole net and contents to the platform. This pole, with the sliding loop, holds the net, from its shore-side, against the back-set of the eddy-current, the outer side being held by a grape-vine rope (some ten or fifteen metres long) attached at *n*, and running down-stream, where it is tied to a tree or stake *t* on the shore. Thus the man standing on the platform can lower his net vertically into the water, the bag-net being opened, and carried by the current up-stream into the eddy. Across the mouth of the net is stretched a fan of eight strings, tied to the cross-bar *ef* (see Fig. 100) at one end, and coming together to a single string at *s*. The salmon, as they enter the net, disturb or shake these strings; and the fisherman (holding the end at *s*), feeling this, instantly draws up the net, the mouth of which automatically closes by the weight of the net and fish therein contained. The affair being lifted out on the platform, the fish are then killed with a club. Formerly, when a new platform of this sort was used for the first time, some ipos-root was pounded fine and thrown into the river; but, except for this, there were no ceremonies.

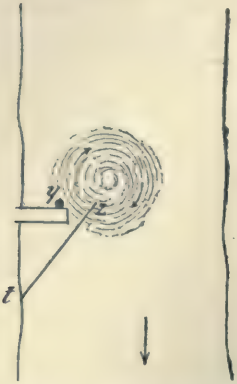


Fig 101. Sketch showing the Manner of Operating a Fish-net.

Among the Shasta in Oregon a different mode of catching salmon was in vogue, successful only where a stream was shallow, and not too rapid. Several rude rafts were constructed of logs, and on these a number of women placed themselves, and floated down-stream, thrashing the water violently all the time with branches. This proceeding frightened the fish, who turned and ran down-stream to where the men stood shoulder to shoulder in a line across the whole width of the river. As the fish came down, they were speared. All fish caught in this manner had to be eaten on the spot that same day. If any were kept, or carried home, it would immediately rain violently.

The Shasta on the Klamath had the following regulations in regard to the first salmon caught each year. It was thought that the first fish to ascend the stream annually brought the "salmon medicine" put on by the Indians at the mouth of the river. This first fish must therefore be allowed to pass unmolested. As soon as it had passed, fish might be caught; but the first one taken from the water had to be split and hung up immediately to dry, and no salmon might be eaten till this salmon was completely dried and a portion eaten by all who were fishing at that point.

Deer were hunted in a variety of ways. In the autumn, deer-drives were made. These were of two sorts. In one case, fences of brush or ropes were stretched across the country, with openings left here and there. In these openings, strong nooses were set and concealed, the ends being tied to trees. The people then went out and beat up the country, driving the deer toward the fence, where they were caught in the nooses, and clubbed or shot. The other method could not be used until the oak-leaves began to fall. Men then went out and set fires in circles on the hills. The ends of the curved lines forming the circles of fire did not meet, and in this opening the women stood rattling deer-bones, while men concealed in the brush were ready to shoot the deer as they rushed out. Stalking was also considerably used. For this purpose the hunter put on the whole skin of a deer (the head stuffed, with the antlers attached), and crept up on the unsuspecting animal. Several different heads were kept, with the horns in different stages, so that they might be suitable for various times of year. Deer were also run down and killed at the season when their winter coats were coming in. They were generally driven to a stream, where men in waiting shot them while the deer were in the water. Dogs were often much used in this style of hunting. In winter, deer were also run down on snow-shoes, and clubbed. Dogs seem to have been used also in the drives, to some extent. They were trained from puppies for hunting, and, while still young, had the "Blow-fly Song" sung to them, so that their scent should be keen. Hunting-dogs were kept in regular kennels, behind the ŭ'mma, or dwelling-house. To make them brave, the "Grizzly Song" was sung to them, and they were then also supposed to be able to scare game, just as the grizzlies scare people. Elk were killed chiefly in winter, being run down on snow-shoes, and shot.

Both the black and the grizzly bear were hunted. For the former, men had to sweat for five days before starting out on the hunt, using fir-twigs on the coals, to give the body an aromatic odor. After this preparation, the hunters would go to the bear's den, talk to the bear for some time, and beg him to come out and be killed. In the case of grizzlies, the hunters had to dance the war-dance before starting out, just as if they were to hunt a human enemy. Reaching the den, a number of short, sharp stakes were driven into the ground in front of the opening, and then, as the bear came out and was engaged in tearing down and clearing out of the way this obstruction, he was shot under the neck.

Regulations as to the division and ownership of game were fairly numerous. The single hunter always shared his game with others on his return: the chief, however, had no greater share than others. The person who killed a deer always had the right to the hide and legs. If two men shot at the same deer, he whose arrow hit first, whether it inflicted a mortal wound or not, had the first right to the carcass. If any other person than the slayer of the deer should get the legs or hide, he might put them in a woman's menstrual hut, or otherwise so contaminate them that the hunter would be unlucky ever after. No hunting was ever done by a man in the time of his wife's menstrual periods.

The first game killed by a boy was never eaten by him or by any member of his family. The boy, for a year or more after he began to hunt, did not eat the game he himself killed. In the spring, if does were killed with fawn, the young fawn was hung up to a tree, and shot at by the smaller boys. Should a boy, before the usual period of a year was up, eat game he himself had killed, he would lose all his hunting-luck. When, however, he did for the first time eat game of his own killing, his father took the bowstring from the boy's bow, and whipped him severely with it, all over.

TRANSPORTATION AND TRADE. — As already stated, the Shasta made practically no use of canoes, because of the unfavorable nature of the streams within their territory. Canoes were sparingly used along the Klamath, but were nearly all purchased from the Karok and Yurok below. When made

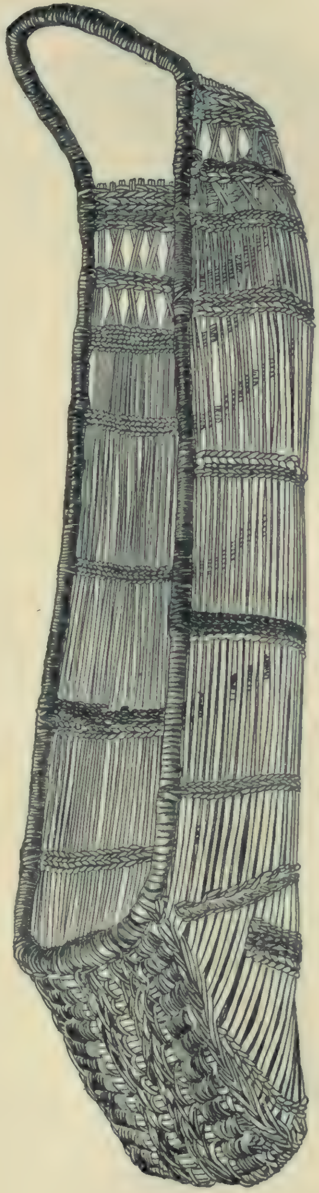


Fig. 102 ($\frac{50}{4074}$). Cradle-frame. Length, 40 cm.; width, 17 cm.

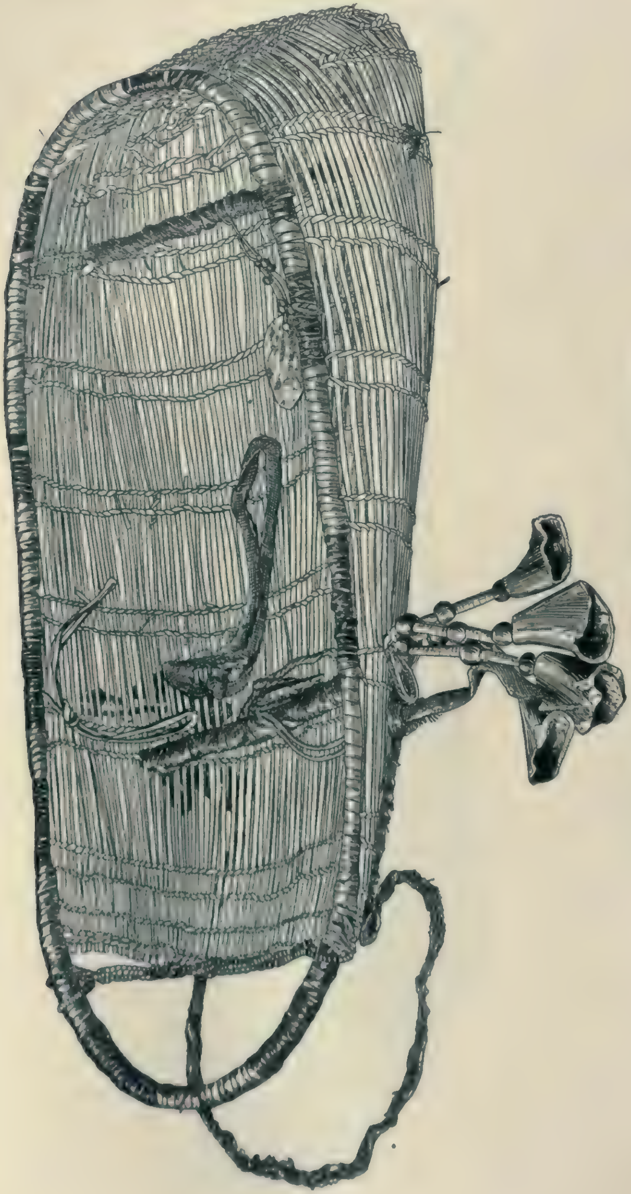


Fig. 103 ($\frac{50}{3188}$). Cradle-frame. Length, 52 cm.; width, 20 cm.

by the Shasta, they were merely imitations of those secured by trade.

The burden-basket was in use here, as practically throughout California. As previously described, the form made largely of rawhide was in use to a considerable extent here. They were carried by the aid of tump-lines of buckskin.

Infants were kept and carried about in cradle-frames (see Figs. 102, 103). These are at present either obtained from the Hupa and other people of the lower river, or are made on practically the same lines. That shown in Fig. 102 is very similar to the Hupa cradle figured by Goddard,[1] except that it has a more elaborate treatment of the upper portion. The technique of this is shown in Fig. 104. The child sits in the cradle-frame, the legs hanging down over the edge, and the body resting, in part at least, on the two wrapped cords stretched across the frame on the inside (see Fig. 103). The piece of flint attached to the upper cross-cord in this cradle is a charm to keep away the small lizard.

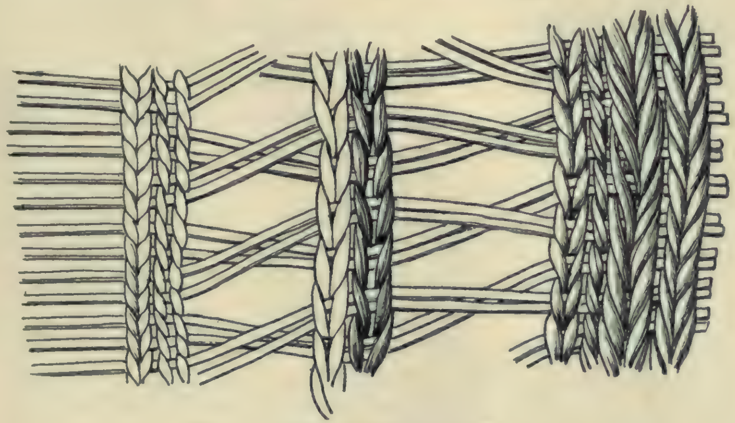


Fig. 104. Detail of Cradle-frame, Fig. 102.

Like a majority of the Indians of the Californian area, the Shasta were a sedentary, stay-at-home people, and rarely made long journeys. On hunting-trips the men often went fifteen or even twenty miles, but had to be careful lest they infringed on the territory of some other village or tribe. Well-beaten trails connected the various villages.

---

[1] Goddard, op. cit., Plate 21, Fig. 1.

The Shasta traded with the Karok, Yurok, and Hupa of the lower Klamath for acorns, baskets, dentalia, and salt, giving in exchange buckskin and pine-nuts. With the Wintun they seem to have traded chiefly for acorns, giving buckskin and obsidian in exchange, together with dentalia. There was apparently little trade with the Klamath Lake people to the eastward, but quite a little with the various Athabascan people of Rogue River and thereabouts.

WARFARE. — The bow was the chief weapon of the Shasta. In use, it was held horizontally. No wholly satisfactory conclusions can be drawn, however, as to the original type of bow. No bows still survive which are unquestionably of Shasta make, several so-called "Shasta bows" having really been obtained in trade from lower down the river. The only bow which was secured (Fig. 105) lacks any sinew backing, and is somewhat roundish in section, and quite different from the bows of the people of either the lower Klamath or of the Klamath lakes. The model of a bow (Fig. 106) secured at Siletz is also without sinew backing; but not much reliance can be placed on this model. Statements as to former practice vary, some declaring that bows were formerly broad and flat, like the Hupa bow, with a sinew backing; others, that they were more rounded, and without the backing. Emmons[1] describes the bow as substantially like the Hupa or Karok type, — broad and flat, with painted sinew backing.

In this connection, perhaps, should be mentioned a peculiar type of bow found in many museums in this country and abroad. In many instances these bows are labelled "Shasta," while in other cases they are simply marked "California." They are very characteristic in the roundness of the bow and the peculiar manner in which the sinew backing is curved around at the ends (Fig. 107). All these bows of which I have any knowledge are old, and were obtained some-

---

[1] Emmons, United States Exploring Expedition, Vol. V, p. 239.

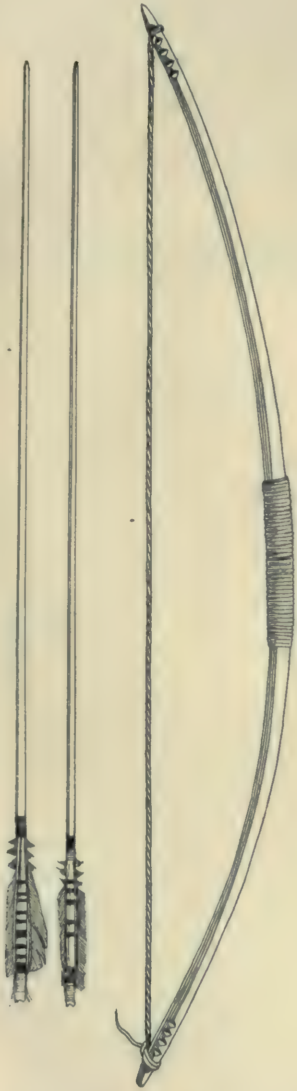


Fig. 105 ($\frac{50}{3187}$ A-C). Bow and Arrows. Length of bowstring, 70 cm.; of arrows, 65 cm.

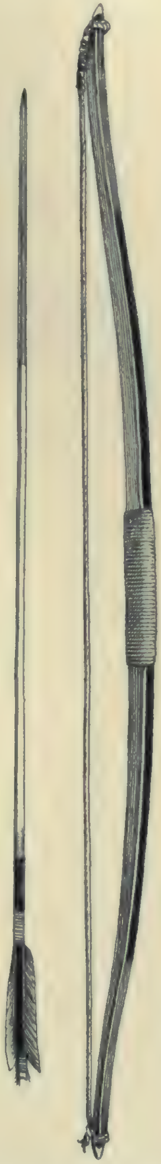


Fig. 106 ($\frac{50}{3180}$ A). Model of bow from Siletz. Length of bow, 76 cm.; of arrow, 68 cm.

where in the period anterior to 1855 or 1860, some of them as early as 1820, or before. Careful inquiry in the Shasta territory has failed to reveal any specimens there, and no trace of the peculiar treatment of the sinew at the ends of the bow has been found among the Shasta themselves. The bow, however, exactly resembles the one shown by Langsdorff,[1] who visited the region about San Francisco in 1803–07, and who came in contact, so far as known, only with tribes of the Bay area. The probability is strong, therefore, that these bows sometimes labelled "Shasta" are in reality from the Bay region, and not from the Shasta, with whom the earlier explorers who visited the California coast could have had no communication. The evidence is also strengthened by the fact that, in the Museum of the Imperial Academy of Sciences at St. Petersburg, there is a large bundle of bows, unlabelled, but of this very type, which were probably brought back by Kotzebue in 1818; and he, as in the case of Langsdorff, came in contact only with the Indians of San Francisco Bay.

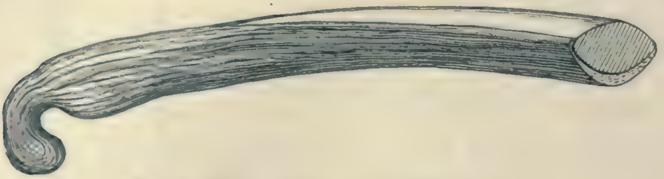


Fig. 107 ($\frac{50}{3439}$). Section of a Sinew-backed Bow.

Arrows (see Figs. 105, 106) both with and without foreshafts were in use; the former for large game and in war, the latter for small animals. Obsidian was chiefly used for the points; but no authentic arrows in good condition were found.

The Shasta used both elk-hide and stick armor as a protection in warfare. The latter was always preferred, and was made of round rods of some hard wood (generally serviceberry), fastened together by twined cords in the usual manner. On the head was worn a band of elk-hide about fifteen centimetres wide. This was sometimes made double, so as to be impenetrable, and was decorated with designs cut in the skin, and then painted.

---

[1] G. H. von Langsdorff, Voyages and Travels in Various Parts of the World, 1803–07, Vol. II. London, 1813.

There was little or nothing in the way of organized warfare, all being accomplished by means of raids. Preparatory to the leaving of a war-party, all the members had to dance the war-dance. This was taken part in chiefly by the men, although some young women always joined in, as they occasionally went with the war-parties, armed with knives, with which they tried to cut the bowstrings of the enemy, and also to slash their quivers. The war-dance is described as follows.

When a war-party was planned, the young men would gather together, and say to the women, "Ha′a, atcaixī′yaxŭ′mmū kwa nī′waiats" ("Now, when it is about sundown, build ye a fire"). In compliance with this, the women built a fire on the dance-ground. The men assembled there, wearing a buckskin wrapped about the waist, and their hair gathered in a knot on the top of the head, and secured by means of wooden pins some ten or fifteen centimetres long. On the knot of hair a pompon of chicken-hawk feathers was set, and one or more mokus (or decorated feathers) stuck in the hair upright. The women came in their ordinary clothes. The dancers stood in line, facing the fire, and danced, stamping one foot only, and holding bow and arrow as if ready to shoot. Some carried, instead, double-pointed obsidian knives from twenty-five to forty centimetres in length, wrapped in the centre (where they were grasped) with buckskin. If women took part, they were placed at the ends of the line, and held pieces of obsidian decorated with feathers similar to that shown in Fig. 108. After dancing for some time in line, a person from each end danced out toward the fire, then turned, and, passing between the fire and the line, went to the opposite end of the line, whence he or she then returned in a similar manner to the original place. The war-cry was sounded from time to time, and the dancers talked loudly of the men they were to kill and the deeds they were to do. The dance kept up all night, and was repeated for three or four nights before the party left. During this period the dancers might not eat meat, and might eat of other foods only sparingly. The entire day and night before leaving was spent in dancing, the party leaving so as to arrive just before dawn at the place to be attacked. When leaving, they were elaborately painted (in red, black, and white) in spots of solid color. White, if it was used, precluded the use of any other color with it. Red and black might be combined. Each man always painted in the same manner.

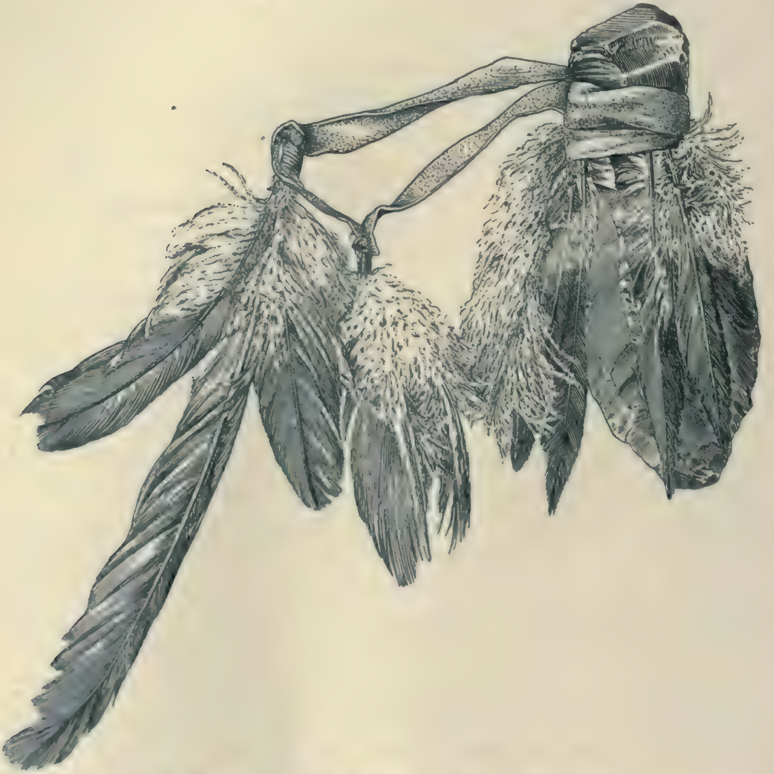


Fig. 108 ([illegible]). Dancing-knife. Length of blade, 19 cm.

There are various prayers used for help and assistance while on war-parties, and an example of these is given on

p. 490. Scalping seems to have been but little practised, and the prisoners taken were as a rule spared, and kept as slaves.

Games and Amusements. — The most important games played by the Shasta were the men's gambling-game (resembling in many respects the grass-game of the Maidu and other Central Californian Indians) and the women's game, or many-stick game, known to the Hupa and to many other tribes. Both these games are still in use.

The men's game (kē′tapig) is played with a bundle of fifteen or twenty carefully made, spindle-shaped sticks known as a′nninai (Fig. 109), painted in bands of different colors. Two of the sticks, however, are left plain, without decoration, and are called āk. Each man's spindles are decorated somewhat differently, examples of the different types being shown in Fig. 110. With such a set of sticks a small red stone is often kept as a lucky-charm, and also a tiny obsidian knife, which is used to cut up glow-worms with which to rub the sticks for luck. In making the sticks, much ceremony is observed. They are generally made by two men together, who, after strict continence for five days, go off into the mountains alone. Here they sing and pray, and are not allowed to eat meat or fresh fish, being restricted to a very little acorn-meal and dried fish. In eating, they have to eat out of small, well-decorated baskets, and may drink water only if mixed with a little acorn-meal. On their return with the finished sticks, the men are obliged to remain continent for another five days, before using the sticks, and must during this time bathe frequently. The sticks are kept in sets, wound around and wrapped with a long cord, as shown in Fig. 109.

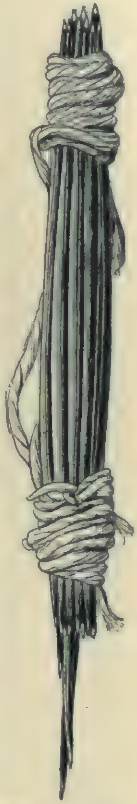


Fig. 109 ($\frac{50}{3139}$). Bundle of Sticks used in the Game Kē′tapig. Total length, 20 cm.

In playing the game, two players seat themselves opposite each other. Each has his set (or several sets) of sticks and a small pile of dried grass. Each has, moreover, seven counters, or small sticks, with which to keep tally. As a rule, these counters are merely seven of the decorated a′nninai, which, being sharp at the ends, are stuck into the ground, or in the mat on which the player sits. Taking one of the plain sticks (āk) and one of the decorated ones, one of the players rolls each separately in a bunch of grass, and then, shuffling the two bunches rapidly, sings his gambling-song, and tries to confuse the opponent, who is to guess which bunch of grass contains the unmarked stick. The bundles of grass are held in the hands, the fists clinched, and either held against the breast, or put on the knees. If the opponent guesses correctly, the loser (who has been "rolling") pays him one of his seven counters; and the opponent then, taking his set of sticks, "rolls," and the first man has to guess. If he lose his guess, he pays a counter to the one who is "rolling." The one who first gets all fourteen of the counters wins. In paying losses, the Maidu method seems to prevail; that is, the paying out of one's winnings as soon as one has any; and only after these are exhausted does the player pay out of the original stock.[1]

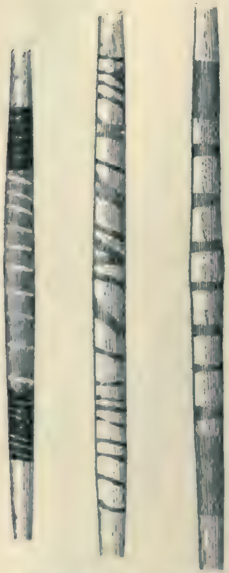


Fig. 110 ($\frac{50}{3882}$, $\frac{50}{3881}$).
Decorations on Stick for the Game Kē′tapig.

In guessing, the opponent indicates the position of the āk, with the index-finger of the hand, on the same side that he thinks the unmarked spindle is. Thus, if the guesser thinks the āk is in the "roller's" right hand, he, facing him, points to that hand with the forefinger of his own *left* hand. If he wishes to use the right hand in pointing in this case, he may do so, but must not point with the index-finger, but with the thumb. Before pointing, he always claps his hands once or twice. As will be explained presently, at one stage of the game the guesser must decide upon two out of three bundles, instead of the usual one out of two. In this case he indicates his choice thus: the three piles being represented by 1, 2, 3, if he wishes to indicate the bundles 1 and 2, he motions with the flat hand on that side (moving his hand from the outside in, that is, toward his body), or with the other hand (moved in the opposite direction; namely, out from the body) if he wishes to indicate bundles 2 and 3. Or either of these combinations may also be shown by using the proper hand, starting in the middle (that is, at the body), and moving outwards. If the guesser wishes to indicate a choice of 1 and 3, however, he points with the index-finger and thumb of either hand.

---

[1] See pp. 213–215 of this volume.

In the course of the game, when the "rolling" side has won five counters from the other, the method of play changes. The next guess, if correct, follows the usual rule; but, if wrong, the loser does not pay a counter, but waits till the opponent "rolls" again. He does so, and this time divides the grass into three bundles, instead of two, placing these on the ground in front of him; and the guesser must now select two out of the three. If his choice does not include the āk, he loses, and has to pay over both his remaining counters, and is thus beaten. If, however, he guesses correctly, he pays nothing, and receives nothing, but becomes at once the "roller;" and the previous "roller" now has to guess.

While a man is gambling, his wife must be very careful as to her food, eating only dry fish and acorns, and drinking only water in which some acorn-meal has been stirred.

The women's game (kū′ig) is also a guessing-game. In this, each of the two players has her own set of sticks, just as in the men's game. The sticks in this instance, however, are of a different type, being slender, peeled twigs about twenty-five centimetres in length and two millimetres in diameter. Some fifty or sixty of these form a set, making a cylindrical bundle some five centimetres in diameter. All but one of the sticks are usually painted alike (either plain red or black), this one, however, having either a black or a red ring about its centre. The game consists in one of the two players guessing the position of this marked stick. In playing the game, the bundle of sticks is held in the right hand, rather nearer the upper end than the middle; the other end of the bundle being rested on the palm of the left hand. By giving the two hands a slow, circular movement in opposite directions in a horizontal plane, the individual sticks are twisted and shuffled among themselves very thoroughly. This being done for a few moments, the bundle of sticks is divided in two, one portion being held in each hand; and the opponent now has to determine in which of the two bundles the marked stick is contained. Each side starts in the game with five counters. If the guesser loses a guess, she passes over one counter to the opponent: if, on the other hand, she guesses correctly, no counters change hands, but the successful guesser takes her set of sticks, and the one who formerly "shuffled" now guesses. As in the men's game, losses are paid out of winnings so far as possible, and the side which first secures all ten of the counters wins the game and stake.

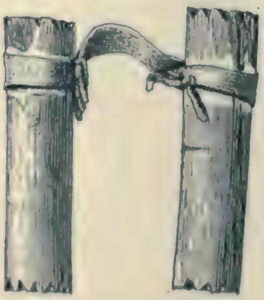


Fig. 111 ($\frac{50}{384}$). Sticks tied together for Use in a Game played by Women. Length of first stick, 12 cm.

So far as known, no dice-games were used by the Shasta. The women played a game in which two sticks or billets about fifteen centimetres long, tied together near their ends by a cord some ten centimetres in length (Fig. 111), were pitched or tossed by means of a staff a metre and a half in length. A goal was set up at either end of the course, and the two billets were set in the ground, halfway between, just the loop of the cord projecting above the ground. The two opposing sides, which numbered from four to ten, faced each other, and the leaders then struggled for the first chance to toss the billets. Each side strove to send the billets to its opponent's goal. The game was essentially similar to that played by the Hupa,[1] the Klamath,[2] and the Maidu.[3]

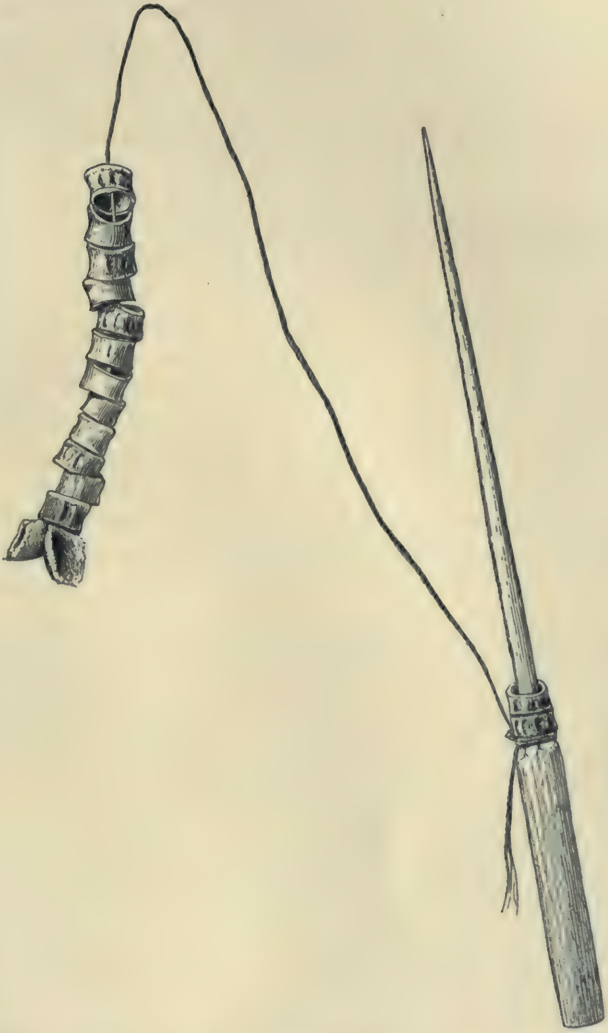


Fig. 112 ($\frac{50}{3183}$). A Form of the Cup-and-ball Game. Total length, 38 cm

---

[1] Goddard, op. cit., p. 60.

[2] Dorsey, Gambling Games of the Klamath Indians (American Anthropologist, N.S., Vol. III, pp. 19, 20).

[3] See p. 208 of this volume.

The Shasta still play a game (Fig. 112) in which twelve salmon-vertebræ are strung on a cord thirty or forty centimetres in length, the end one being tied transversely to prevent the others from slipping off. The cord is attached to a slender, sharpened wooden pin about fifteen centimetres long. The game consists in swinging the bones upward with a quick motion of the hand, and trying to catch as many as possible of the vertebræ on the pin. Each player tries five or six times, and the winner is he whose total of bones caught is the highest. The greatest skill is needed to catch the end vertebra, which has its opening at right angles to the others. Each vertebra is called a "moon," and, by playing the game chiefly in winter, the moon is made to grow old quicker, and the winter thus shortened. The catching of the end-bone, which is called the "eye of the moon," kills the moon, as they say, more quickly than catching the others. In winter, also, cat's-cradle figures are made by the young people. These are made only during the waxing of the moon, the looping and stretching of the cord being supposed to hasten the growth of the moon. During the wane of the moon, on the other hand, the above-mentioned game of the salmon-vertebræ is played, to hasten the moon's death.

Boys formerly played a game in which disks of yellow-pine bark, with or without a hole in the centre, were rolled down hill, and shot at with bow and arrow as they passed. Boys played with a small top made from an acorn, and also had a "buzzer" made of the metacarpal bone of a deer. Small children also played a game in which each of two children held in the hand the forked stem of a certain plant. These were then hooked into each other, and each child pulled, the stem which broke making its holder the loser. As soon as this was determined, the victor struck the loser with a switch, calling him or her "dog."

ART.

DECORATIVE ART. — The Shasta show, on the whole, less artistic development than the majority of the Indians of

Central California, but, like the most of the Indians of the State, they exhibit it chiefly in basketry decorations. As compared with the Central Californian people, the Shasta, perhaps, evidence a somewhat greater growth of painting and of plastic art.

The basketry designs of the Shasta appear to be rather few in number and simple in character. As has been said, basketry-making is now hardly practised at all by the Shasta; and practically all the baskets in use, or sold by them, are bought from the people of the lower Klamath. Two women, however, were found who consented to make some baskets such as the Shasta formerly made, and with their old designs. As one of these women was living on the Siletz Reservation, and unable to get the traditional materials, she had to employ those in use by the Athabascan Indians of the region, but claimed that the technique and designs were purely Shasta. Long association with other people on the Reservation may, however, have had its effect, and I do not feel fully confident that either these baskets, or those obtained on the Klamath River, are to be regarded as certainly Shasta in technique or decoration.

The designs, and the arrangements of designs, on these baskets, agree in part with those of the Northwestern, Northeastern, and Maidu types as defined by Dr. Kroeber.[1] Considering the designs in themselves, we find some fifteen represented on the baskets here shown. Of these a number are similar to Hupa, Yurok, and Karok designs. The commonest decoration on Shasta baskets is that shown in Plates LX and LXI, and known as "wood set up around." This is essentially similar to the Yurok "elk"[2] and the Karok "cut wood."[3] The design shown in Plate LXII, Figs. 1 and 2, known as "flint goes around," is the same as the Yurok and Karok "flint."[4] Again, Plate LXIII, Figs. 1 and 2, for which no name was secured, resembles the

---

[1] Kroeber, Basketry Designs of the Indians of Northwestern California (University of California Publications, American Archæology and Ethnology, Vol. II, pp. 152 et seq.).

[2] Ibid., Fig. 67.

[3] Ibid., Fig. 157.

[4] Ibid., Figs. 7, 121.

Yurok "ladder."[1] Plate LXII, Fig. 3, called "butterfly," is practically the Yurok "waxpoo."[2] The design on the basket shown in Plate LXII, Fig. 4, called "salmon-heart," is very much like the Yurok and Karok "sturgeon," or "snail's back."[3] This same design is frequently found on Northern Wintun baskets.[4] Another resemblance to the Wintun is shown in Plate LXIV, Figs. 1 and 2, "it goes round one way;" this being similar to the "pulled around," shown on a basket from the upper Sacramento.[5] Resemblances to designs found even farther south are also to be noted, as in Plates LXIV, Fig. 3, and LXV, Fig. 2, where the design, called "it goes round crooked," is identical with the Maidu design of "wood in billets."[6] Again, Plate LXV, Fig. 3, known as "frog's-belly," resembles the Maidu "water-snake."[7] The meaning of the designs shown in Plates LXV, Fig. 1, LXVII, Figs. 1 and 2, and LXVIII, Fig. 2, are unknown.

The design in Plate LXIV, Fig. 2, known, like that in Fig. 1, as "it goes round one way," suggests in part the Achomā'wi design of the "skunk."[8] Plate LXVI, Fig. 1, also suggests Achomā'wi motifs, resembling one of the elements in the design called there "mussel's-tongue."[9] The simple bands shown on many baskets are found among most of the stocks in this whole region.

The design names in use among the Shasta are few in number and are more of the type of those in the northwestern and northeastern areas than of the region farther south. This is shown in the presence of purely descriptive names. The animal names given — such as salmon-heart, frog's-belly, and butterfly — are either uncommon or unknown among the surrounding stocks.

Feather-work was comparatively little used by the Shasta;

---

[1] Kroeber, Basketry Designs of the Indians of Northwestern California (University of California Publications, American Archæology and Ethnology, Vol. II, Fig. 59).

[2] Ibid., Fig. 39.

[3] Ibid., Figs., 73, 174.

[4] Ibid., Fig. 216; see also this volume, Plate XXIII, Figs. 2 and 7.

[5] See this. volume Plate XXIV, Fig. 5.

[6] Ibid., Plate XV, Fig. 2.

[7] Ibid., Plate III, Fig. 2.

[8] Ibid., Plate XVIII, Fig. 4.

[9] Ibid., Plate XVIII, Fig. 1.

and the few articles made for ceremonial purposes were rather simple as compared with those made by the Maidu, for example, or by the Hupa. While, among the Maidu, carving was practically unknown, the Shasta illustrated the rudiments of the art in the carved handles of their wooden or horn spoons (see Fig. 71) and their mush-paddles. These, however, show much less development than those of the Indians farther down the Klamath River.[1] Painting, except on the bow, was apparently confined chiefly to the elk-hide frontlets worn in battle. No specimens of these are now in existence; but the nature of the designs is said to have been similar to those on the basketry. Buckskin skirts worn by shamans often had rude zigzags and dots of red paint applied, as shown in Plate LXXII.

No rock paintings or carvings are known in the area occupied by the Shasta, with one exception. At Gottville, on the Klamath River, there was formerly a large bowlder, on which were cut or scratched, according to the various accounts, many figures. Some are said to have resembled bear's feet; and others are described as "like hieroglyphics," whatever that may mean. A local photographer once took several negatives of the rock, which is well remembered by some of the older settlers; but not the slightest trace of these can now be found. Search for the bowlder itself has also proved unavailing, as it had probably been either washed down by the river, or at least turned over and partially buried by debris, during a period of unusually high water which occurred a few years ago.

Music. — The Shasta have little beside the flute in the way of musical instruments. The flute, however, was but little used, it seems, as compared with the considerable use made of it in the central parts of the State. Single and double whistles, of bird-bones, were in use by the shamans, and also were used in the war-dance. So far as my information goes, no drum of any sort was used. Rattles (Fig. 113) were made of deer-hoofs attached to a stick, stick and cords being dyed or painted red. These rattles were used chiefly by young girls during the puberty-dance. The cocoon rattle

---

[1] Goddard, op. cit., Plate 16, Figs. 3, 4, 5, 6, 7.

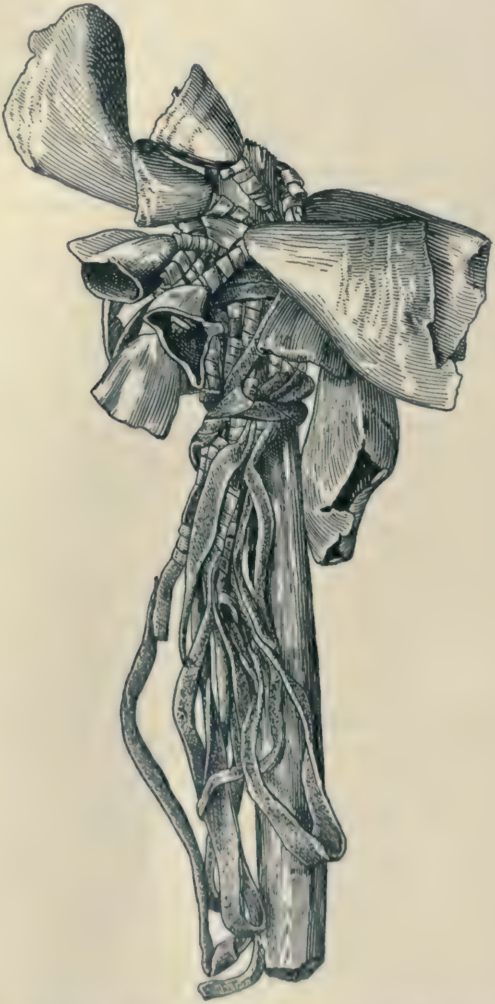


Fig. 113 ($\frac{50}{89}$ A). Rattle made of Deer-hoofs. Length of handle, 20 cm.

and the split-clapper rattle, both common in Central California, seem to be lacking.

SOCIAL ORGANIZATION AND LAW.

SOCIAL ORGANIZATION. — The social organization of the Shasta was somewhat intermediate between that of the Central Californian area as exemplified by the Maidu, and the Northwestern area as shown in the Hupa. As is the case practically throughout California, no trace is to be found of any gentile or totemic grouping. People lived in village communities, generally of small size, and not infrequently, it is said, consisting of only a single family. In so far we have the formlessness of the Central area; but we find among the Shasta the additional feature, that the various communities were organized, or, perhaps better, grouped into four divisions. These were the Wirūhikwai'irukla, or Klamath River people; the Wīwehä'wakŭtsu, or Scott Valley people; the Ahōtirē'itsu, or people of Shasta Valley; and the Ikiraku'tsu, or people along the Stewart and Rogue rivers in Oregon.

Each of these groups had a head man or chief, the position being declared to have been hereditary, passing first to the next oldest brother, and, in default of a brother, to the oldest son. For sufficient reason, the chief might be deposed, and the next in succession appointed in his place. No woman could be chief; nor could the sisters of a chief marry any one in the tribe who would be of rank sufficient to be elected chief. If the regular successor were too young to act as chief, the chief of the neighboring section or group would serve as regent during his minority, the female relatives of the young chief being co-regents in all matters of minor importance. The family in each group in which the chieftancy was hereditary was by tradition originally the wealthiest one, and a chief must be wealthy, or else he was not allowed to take his position. This prominence of wealth as a necessary characteristic of a chief resembles somewhat the conditions among the Hupa. The necessity for the possession of wealth on the part of the chief lay in part in the fact that he often had to advance, or pay out of his own property, the fines required as blood-money of the people of his group. His other duties were to act as adviser to his people, and particularly to settle disputes both within and without his tribe. An important part of his duties as mediator consisted in arriving at some agreement with aggrieved parties as to the monetary satisfaction needed to balance accounts in cases of theft or murder. As just stated also, in instances where the aggressor could not pay, the chief often advanced the property, or in some cases paid it outright for the poorer people. He did not take part in war, but, when the fighting was over, he with the chief of the enemy, aided by several old men from each side, agreed on terms of peace. There was, however, no formal body which could be called a council.

Slaves were held by the Shasta in a few cases. The custom was not regarded very favorably; and persons owning slaves were said to be, in a way, looked down upon. The slaves were fairly well treated, apparently, being taken into the family, and, if young, brought up with the children.

Rights of property were, in general, similar to those among the Maidu. Fishing-places, and in particular fish weirs or dams, were private property belonging to specific families. Only the wealthy, however, had any such property. Members of the family alone had the right to fish there; but to strangers or others they had to give fish, if asked, and they generally allowed them to fish for themselves now and then. If a member of the family died, no other member of the family could fish there for two years, and, of course, no outsider. To a less extent, each family seems to have had its own hunting-grounds, to which some regulations applied, but more laxly than to the fishing-places. Both hunting and fishing places were inherited in the male line. Each village had a well-recognized territory, within which the areas of the different families lay; but there was not, apparently, as much care taken to make exact boundaries as among the Maidu, nor was there any such system of policing the village territory as obtained there, according to the information secured from Mr. Spencer.

The division of labor among the Shasta was similar to that among the Maidu.[1]

---

[1] See this volume, p. 227.

CRIMES AND PUNISHMENTS.—In all minor affairs, such as theft, the chief acted as mediator and settled the quarrel, generally by exacting a payment to recompense the aggrieved party. For more serious crimes, as murder, there was more formality. One or two well-known men were hired by the aggressors to act as go-betweens, and these went to the family of the murdered man, and tried to arrange for blood-money to be paid. This was sometimes merely property in dentalia, skins, food, etc., but often included one or more women. The payment of property was usually a simple affair to arrange, as every individual had his or her fixed value, depending on the price paid for their mother by their father at marriage. Blood-money must always be accepted, if offered. Revenge, either on the murderer or on any of his relatives, might, however, be taken before the offer could be made. Should such revenge be taken on any one not the criminal himself, the regular payment for such person must be made to the relatives, thus offsetting in part or in whole the sum they were required to pay for the first killing. In cases of murder, the friends and relatives of the murdered man went about praying that the murderer might die, or be injured in some accident. If this happened to him or to any of his family (who were generally included in these prayers), it was regarded as due to the latter that the accident or death took place, and the relatives of the murdered man were then held just as much responsible for the blood-money as if they had killed or injured the individual by bodily violence.

BIRTH, PUBEUTY, MARRIAGE, AND DEATH.

The following account of the former customs in these matters is based, of necessity, almost entirely on descriptions given by older Indians, the customs themselves having now almost entirely disappeared.

BIRTH.—As soon as a man's wife has conceived a child, both he and she are subject to many regulations. He does not hunt much, and, toward the close of the period of pregnancy, not at all. If he hunts, he must kill only deer; for, should he kill a pheasant, the child, when born, would be subject to epilepsy. Should he kill a coyote, the child would always be erratic and strange. The woman, on her part, has to observe some food-restrictions, and in general eats but little, particularly as the time for delivery approaches. She must be very careful not to look at anything unusual, lest it affect the child. Should she, for example, see a wounded person, the child would bear a birth-mark where the wound was. Should she see a deformed person, the child also would be deformed. She must not step over a dead rattlesnake, lest the child be born blind; nor is she allowed to eat rabbit, for fear that the child will have a hare-lip. Neither she nor the father must look a dead person in the face.

When the time for delivery approaches, the woman goes generally to her menstrual lodge, and, aided by some old woman (generally a relative), gives birth to the child. During delivery, the woman assumes a half-reclining position. If the delivery is delayed, water from an eddy in the river is given to the woman, and special songs sung. Large payments are necessary to be allowed to learn these songs. They relate how Anakuna (apparently a large species of hawk) once bore five children in his nose. For a long time he could not secure the delivery of the children, but finally, on drinking water from an eddy in the river, the children were born immediately.

As soon as the child is born, the umbilical cord is tied with a strand of the mother's hair, and the child, after severing the cord, is washed in cold water, nursed immediately, and then laid on a tray-basket, which is set on a cooking-basket full of boiling water. Here, in the warm vapor, the child is kept for five days, at the end of which period the umbilical cord is supposed to drop off. The cord was generally decorated with beads wrapped in a bit of buckskin, and carefully kept by the mother, being hidden in the hollow of a tree a mile or more from camp. In other cases, this practice seems not to have been followed, the cord being burned just at dawn of the sixth day. The after-birth is burned. No matter what season of the year it may be, it is thought that rain almost immediately follows the birth of a child.

For a month after the birth of the child, the mother remains in her menstrual hut, subject to strict food-regulations. For five days she must use a scratching-stick (Fig. 114). The father also, during these first five days, is under restrictions. He must stay by himself, away from the village; he must sleep but little, may eat only dried fish and acorns, and must bring wood every night to the sweat-house, where he sweats every day at dawn. At the end of the five days, he bathes, and may then resume his regular life. The woman, at the end of her month's seclusion, also bathes, and then takes up her usual duties.

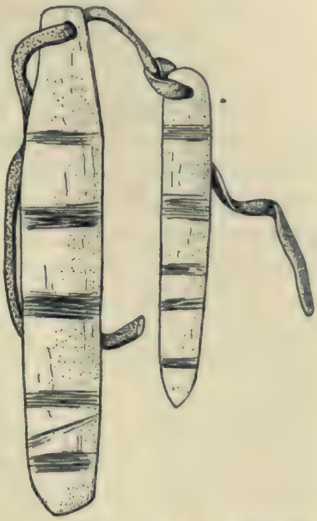


Fig. 114 ($\frac{89}{4070}$ A-B). Scratching-stick used by Women after the Birth of a Child. Length of longer stick, 11 cm.

After the first five days, during which the child remains in the basket over the steaming water, it is placed in a regular cradle-frame (see Figs. 102, 103), wrapped first in a small foxskin. At the end of the month, when the mother resumes her ordinary life, she puts the child on a new and larger cradle-frame, in which the child is kept till it is able to creep. To both cradles, pieces of obsidian (generally small arrow-points or knives) are attached, in order to keep Ta'matsi, the small lizard or swift, away from the child. If this were not done, it would say to the child, "Laugh," or "Cry," and make the baby fractious. When the child has reached an age where it no longer requires a cradle, both the first and the second ones are taken by the mother, and hung on a black oak, at some distance from the village.

If a child is still-born, both man and wife must fast rigor ously, and sweat and bathe frequently, for ten days. After this time, they must secure the services of some one to perform a ceremony for them, the ceremony involving chiefly the singing of certain songs. The man cuts his arms with a flint knife in several places, rubs in some sort of powdered root, and drinks an infusion of several herbs. After this, both man and wife resume their usual life. A parallel ceremony for the woman was also necessary; but the details of neither could be secured.

NAMES. — Children are not named till they are a year or so old. The names given may be either those of some animal or bird, or more usually refer to some characteristic of the child or its parents. Thus, if the child's father is a good hunter, it may be called Ō′wariya′hawir; if a good gambler, Ayakwā′hawir; if a good fighter and leader, I′rūhuti′kahīrū; or, if the father is lazy and of little account, Ā′psair. Girls are named after their mother's characteristics; as, if lazy, Apsā′tswirax; if a good worker, Irakwi′tswirax. Names referring to personal characteristics are such as Irahō′xūkwīd ("striped around"), or I′raxagi′skisir ("hair sticks up straight"). Others, again, chiefly persons of considerable standing, have the names of certain Axè′ki ("pains"), such as Ā′wariknèkĕ ("two crowns in hair"), or Irahō′dikahiru. A name once given holds, as a rule, for life, and no other names are given either to men or women at a subsequent period.

When a person dies, his or her name is not mentioned by the relatives, but may be by other people, except to the relatives or in their hearing. This restriction gradually dies away, and after several years the name or the word (if the name is the name of some animal or other) again comes into general use. To mention the name, however, to a relative, during the prescribed time, is one of the greatest insults possible.

Children have their hair burned off close to the head, with the aid of a small torch, at the age of one month. This process is repeated periodically, in the case of boys, till they reach the age of two or three years, when the hair is allowed to grow long. In the case of girls, after they reach the age of three the hair is allowed to grow long, except for a broad strip from the forehead, over the crown of the head, to the neck; this strip being kept short by burning, as before. This peculiar type of hair-dressing is continued till the age of puberty. At the age of about ten or eleven, both boys and girls have their ears pierced. It is done, as a rule, with a porcupine-quill, and for a period of five days the girl or boy must sleep but little, eat sparingly (and only of dried fish and acorns), and must walk about much alone among the hills.

PUBERTY. — Puberty ceremonies were held by the Shasta only for girls, and, so far as has been ascertained, the details of the ceremony appear to have been alike throughout the whole area occupied by the stock. According to the accounts, the ceremony begins at once, on the night after the girl attains puberty. She goes to her mother's menstrual hut or to a special hut built for her. Her face is painted with a number of vertical stripes in red,[1] running from the forehead to the chin; and on her head she wears a feather head-dress (see Fig. 84) consisting of a wide visor of bluejay-feathers, which shields the eyes completely, so that the wearer cannot look up, or see the sun or moon. In some cases there is a cap-like addition to the visor, so covering all the head, which tends to obviate evil dreams. In the menstrual hut the girl remains for a good part of the day, for ten days, and is always accompanied by her mother or an old woman (or more than one), who does everything for the girl, cutting up her food, washing her face, and combing her hair. She may not speak to any one, except her mother or female attendant, during this period of ten days, and only to her in a whisper. She must wear her moccasins all the while, and must use a large scratching-stick (see Fig. 114) of bone for her head, and a smaller one for her eyelids. She must not come near a fire, nor look at one directly, during the whole period; nor may she look at people, or at the sun or moon. She must not get excited, nor hurry in doing anything. During the whole time, she is subjected to strict food-regulations, and may drink only water that has been warmed and into which a little clay has been stirred. She is allowed to sleep but very little, and that just before dawn. In sleeping, she must place her head in a mortar-basket across the small end of which a stick is placed. This is to keep evil spirits away from her head. The stick which is put across the opening is burned every morning by the girl's attendant, and a new one is prepared for the next night. All the time the girl remains in the hut, she must sit facing the east, and holding a deer-hoof rattle in her hand, which she shakes from time to time. Every day she must go up into the mountains and bring back several loads of wood, which are used for the fire for the evening dance. She must also bring a small quantity for every house in the village. She is accompanied on these excursions by two or three young girls, and, should she meet any one on the trail, they at once turn aside, and allow her to pass. Whatever she dreams of during this period, she confides to her mother, and all these dreams are bound to come true. Should she be so unfortunate as to dream of the death of any person in the village, or of a general conflagration, the only way the calamity can be averted is to burn the unfortunate girl alive. For this sacrifice, which, it is said, has several times been made, the girl is decked in all the finery the family possesses, and made to leap into the centre of a huge fire built by members of the family.

---

[1] See this volume, p. 233.

The first night of the period of ten days, during which all the above restrictions and regulations are in force, a dance is held. To this and the dances of the succeeding nights, many relatives and friends are invited; but all these do not arrive in time for the first dance. In this, the girl, painted as described, and dressed in her ordinary clothes (to which, however, deer-hoof rattles are attached), dances before all who are assembled. She wears the feather visor or cap, and carries deer-hoof rattles in her hands. The assembly at first consists mainly of women, although some men are always present. All the onlookers sit in rows, facing eastward, their backs to a large fire, lit to give light. Most of the men and women have rattles similar to that held by the girl. Some, however, have sticks with which they beat time on thin boards. The girl dances back and forth, east and west, always keeping her face to the east and her back to the fire. She herself does not sing, and when she grows tired, a man (or two men) dances with her, supporting part of her weight.

After this style of dancing has gone on for some time, a change occurs. In the succeeding form of dance, a large ring is made by the whole audience, on the east side of the fire, or two concentric rings, if the number is large. All hold hands, the girl and two or more helpers, however, standing in the middle of the ring, facing east, and dancing sideways from north to south; while the ring dances round them, first in one direction, and then in the other, singing the while.

By this time, it is probable that several parties of friends or relatives have arrived from neighboring villages. These may not, however, join in until certain ceremonies have first been gone through. A party, composed partly of men and partly of women, arriving near where the dance is going on, cut bunches of brush, and, holding their bows and arrows, advance slowly, crying out that they are coming, in order to warn the dancers of their approach. All are painted as if for a war-dance. As soon as the shout is heard, the dancers engaged in the "round dance" instantly stop, and the visitors approach in a long line, their backs to the fire, and the bunches of brush held over their faces, to conceal their identity. Then, holding the bunch of brush in both hands, the men point first to the right, and then to the left, and then all dance. This pointing and dancing alternate five times, while the girl herself comes out from the circle of dancers and runs back and forth in front of the line of visitors, keeping time with their song.

The pointing and dancing having alternated five times, the men throw away the brush, and, locking arms, dance sideways, this way and that, to a very lively song. At this juncture, the girls and women of the visiting-party, who thus far have remained out in the brush, run up, each seizing from behind the belt of a man, and dancing behind him, holding the belt in both hands. The girl herself at this stage stands at one side, still facing to the east. Five times the visiting men and women dance in line thus, the women holding the men by the belt; then all suddenly start, and run as fast as they can in a circle around the girl for whom the whole ceremony is held, and also around the whole dance-place, where all the other persons are standing or sitting. This being done, they at once fall into the circle of the "round dance" (interrupted by their arrival), and the latter dance then begins again as before, now with a larger number of dancers. The "round dance" is then continued till nearly dawn. This same ceremony is gone through with, in its entirety, with every new party of guests arriving. It sometimes happens that in the "round dance," the girl, or Wā'pxi, as she is called, leaves her place in the centre of the ring for a time, and joins in with those forming the circle, later returning to her place.

These two types of dances, the Ku'stirūma and the K!è'pxig, are kept up every night of the period of ten days during which the Wā'pxi has to remain in the hut, fasting, and gathering wood in the daytime, as above described. Toward the end of the period, — what with her fasting, her daily labor in carrying wood, and her long hours of dancing every night, — the Wā'pxi often gets so weak that she has to be supported almost constantly in the dance. On the tenth and last night she must remain in the centre of the ring of the K!è'pxig all the time, not leaving it at all. This night, the dance is kept up till dawn, when all stop for breakfast. This over, several different songs are sung and the dance is continued. As noon approaches, one or two of her men supporters now and then tap the feather visor which the Wā'pxi has worn all the time, and then lift it up a little, replacing it, however, at once. As time goes on, the visor is raised higher and higher, till finally it is taken entirely off and held over the head, only to be again put back. As noon comes still nearer, the visor is taken off and thrown into the air, and put back again, till, when it is just noon, the head-dress is removed, and thrown high into the air toward the east (outside the ring of the dancers), and is there caught by a man sent out for the purpose.

Immediately the dance stops, and the girl and her mother go to the river, where they bathe, and put on new, clean clothes. While this takes place, the others sit down and rest. The girl now returns, dressed in her best, with all her ornaments, and all present then dance the war-dance; the girl dancing back and forth before the others, accompanied now by a young girl who as yet has not gone through the ceremony. The girl and her aid stand at opposite ends of the line, and dance then to the opposite end, and return, as described in speaking of the war-dance. When this dance is over, the girl's mother brings out a quantity of food in baskets, and all the guests partake, after which they return to their homes, and the ceremony is ended.

The entire ceremony, however, in all its details, is repeated again on the occasion of the next two menstrual periods, and then, and only then, is the girl considered marriageable. The whole triple ceremony is one of great expense to the girl's family, as they have to lodge and feed the guests during the whole period of ten days each time. It is said that here, as among the Maidu, the last night of the ceremony in each case is one of great license, in which all women (old and young, married and single) are regarded as free to all; and couples drop out of the ring of the dance, returning later to take their places again.

At succeeding periods, after the completion of the three puberty-dances, a woman secludes herself for five days in her menstrual hut, eats only dried fish and acorns, and at the end of the time bathes before returning to the family house. Should a woman be taken unexpectedly ill while in the latter house, all men leave at once, taking with them their bows, spears, and nets, lest they become contaminated, and thus all luck desert them.

MARRIAGE. — There is considerable variety in the customs relating to marriage, in regard to the manner of obtaining a wife. In wealthy families, it is often the custom to betroth the children while still very young, the father of the boy paying at that time to the family of the girl the full purchase-money. The couple may not happen, however, to meet till the very day of the marriage, for the wife is generally, although not always, chosen from another village. The consent of the girl in such cases is not needed, and often she is married against her will. The girl is, in cases of betrothal like this, simply brought home by the father and mother of the boy, after she has passed through the puberty ceremony. All the relations then assemble. There is a big feast, but no dancing. The girl is left at the young husband's house for three or four months, and then the couple, with some of their relatives, go on a visit to the bride's family. When the bridal party first comes to the groom's house, they come in all their best; and these gala clothes and ornaments are left as a present with the groom's family. The same display is used when the two newly married people and their relatives visit the bride's family; and the clothes and ornaments worn on this occasion are presented to the family of the bride, thus returning the gift made to the husband's family in the first place. There thus results an interchange of property. The visit made by the newly wedded pair to the bride's parents lasts, as a rule, from a week to two weeks, after which time the couple return to the home of the husband's father. As a rule, the young married people live at the house of the husband's father, and do not build a new house for themselves.

If a man is poor, he is obliged to follow another plan in securing a wife. Under these circumstances, he has to go and seek his bride for himself. Having found a girl whom he favors, his relatives and friends all help him to gather together the purchase-money which they regard as sufficient. He then takes this in person to the girl's family. If they consider the amount satisfactory, and like the appearance of the man and his reputation, they accept the property, and the girl is his. If a man is known to be a good hunter and a good man, he is often gladly accepted by the girl's parents as a son-in-law, even if he is unable to pay in full at once. Under such conditions, he pays the remainder of the price later, as he is able.

Should a man be unable to pay anything for his wife, he may yet be accepted, but only on condition that he live with his father-in-law, and hunt and work for him, till an equivalent of the purchase-money has been paid.

Thus it is regarded as essential to have a definite sum of money paid, directly or indirectly, for a wife, in order that her children's value shall be fixed. There is also a direct incentive on both sides to set a good price; for by custom each child is valued at a sum equal to the purchase-price of the mother, and, if the child is killed or injured, blood-money to this amount can be demanded.

If a girl is known to be immoral, her parents are glad to get rid of her for a very small sum, and both she and the man who marries her are looked down upon. Should a man elope with a girl, there is apt to be serious trouble, yet, if he pays her full value afterwards, the affair is, as a rule, regarded as settled. Should he elope with a girl who is not yet of age, the matter is not so easily adjusted. Occasionally a girl is sent by her parents to a man known to be of good character and a good hunter. She is sent free, as it were, and no money-payment is asked. The man is not obliged to accept the girl; but to be refused in such cases is considered a great disgrace.

The ordinary people rarely buy more than one wife, and, if they have more than one, the others are generally obtained through the custom of the levirate, or by capture in war. Inasmuch as, among all but the wealthy, a man's brothers and relatives always contribute to aid him in buying a wife, it is regarded as only proper and just, that, should he die, the wife whom the brother has helped to pay for should be given to him in return for his aid. Failing a brother, any male relative will do. When a man has more than one wife, the first one (or the one he purchased) is always the head of the family. The wealthy can and often do buy more than one wife, and in such cases, where all are obtained on the same basis, there is no distinction between them.

If a wife fails to bear children to her husband, his parents complain to her parents, and, if the wife has sisters or cousins who are unmarried, the wife's family sends one of them to the man as a second wife, free. Sometimes, however, the husband simply sends his wife back to her family, who are then obliged to refund to him the original purchase-money, and are obliged to return just the same sort of property which was originally given. If the wife is immoral, whether she has borne children or not, the husband can similarly send her home and receive back the original payment. If a man chooses, he may divorce his wife at any time, with or without reason, and send her home; but if he cannot prove her to have been immoral, and unless she is barren, he can claim nothing from her family. In such a case, or if in either of the other cases, the purchase-price is not returned by the wife's family and the woman remarries, the first husband's relatives, or he himself, will, if possible, kill the second husband. If the payment originally made for the wife is refunded, however, the husband and his relatives cannot object to any remarriage. Usually a divorced woman does not remarry, but becomes to all intents and purposes a prostitute.

A woman may at any time leave her husband, if she has cause; but in such cases her family always force her to return at once. If she refuses, she may be killed. Should a man's wife die, he may not remarry for a year, and then only within the family of his deceased wife. Should her family not include any marriageable person, or should they be willing, he may take as his second wife some one not related to his first. This permission must in all cases, however, be obtained. In such cases of a second marriage inside the first wife's family, one of her sisters or cousins is generally chosen, and for her a small payment only is made.

In cases of adultery, the aggrieved husband always kills the man, if possible. None of the offender's relatives may interfere, and money-payment is never even offered in lieu of the blood-revenge. When the man has been killed, both families meet together and settle on a small payment for the murder. Should a man, however, have been too poor to pay for his wife, and have had, as above described, to live with his father-in-law, then, in case of adultery, he has no redress whatever. He may leave her if he chooses, to be sure, or may stay with her, but he can neither get damages from her family, nor take revenge on the man who has wronged him.

The property given for a wife formerly varied greatly, but an average price is said to have been one or two deerskins, fifteen or twenty long dentalia, ten or fifteen strings of disk beads, and twenty or thirty woodpecker-scalps.

DEATH AND BURIAL. — When a person dies, the body is at once taken out of the house through an opening made in the roof. It is laid out, washed, and dressed in the best clothes the person has. Should the death be a sudden one, the body is kept four or five days before burial, so that relatives living at a distance may have time to arrive. During this time, the body lies outside the house, with a fire burning near by, and it is moved about from time to time, not being allowed to remain in the same spot for more than an hour or two. During the period which elapses between the death and the burial, the relatives must sleep but very little. If the deceased has been ill long, the burial is generally immediate, as all the friends are likely to be near.

As soon as possible after the body has been prepared, relatives and friends who are or have been recently ill, or had trouble of any sort, gather about, each carrying a small fir pole some two metres in length, trimmed of branches, except at the tip. The relatives and friends form in a procession, and dance, weeping, in a ring about the body, speaking to the dead, and telling him that he is going to another world, and begging him to take with him all their pains and troubles, and carry them far away. This is kept up as long as the body remains unburied, one party changing off with another in the dance. When this portion of the ceremony is over, the nearest relative of the deceased collects the poles carried by the dancers, and piles them at one side, to be used later in making the paling about the grave. A fire is kept burning, as has been said, near the body; and in the evening some of the younger people go off and collect fir-branches, which they attach to their heads and about their waists, neck, arms, and legs, and then return, singing, to dance about the body. If the man has been killed in war, the dancers carry bows and arrows, and knives, instead of branches, in their hands. After the dance is over, the fir-branches are stripped from the dancers by the nearest relative of the deceased, and piled in a heap, to be used to line the grave with when the time for the burial arrives. As the branches are stripped from the dancers, several men seize the body, and raise it high in the air. By this time, the body has probably been already rolled in skins, and securely tied. Near relatives, at this time, often gash their arms and legs as a sign of mourning. All relatives and friends who come to the ceremony bring a little shell-money, which they lay on the body. Part of the beads thus given are buried with the person, being pounded up fine, and mixed with earth or sand, and sprinkled over the top of the grave after it is filled in. Besides shell-money, friends and relatives bring, as a rule, some other property as gifts to be buried with the deceased. Of these gifts, they get a portion returned to them, part only being buried.

When the dance is over, the burial takes place. This occurs always at mid-day, or as near it as possible. Two relatives, as a rule, dig the grave, which is made a little over waist-deep. Each village has its own graveyard, generally on a small flat or bench near by, although, in some cases, as much as a mile or more away. There is some doubt as to whether the grave-diggers are paid for their work. The grave, being prepared, is next lined with fir-branches, those used in the dance being commonly used. The body, rolled in skins, is then placed in the excavation, extended, and lying on the back, the head toward the east. One informant stated that a side excavation is made at the bottom of the grave-pit, and the body put into it, a stone being then placed over the opening, and the pit filled in. This is said to be done on account of grizzly bears. With the body is placed the man's bow and arrows, spear, and other implements; or baskets, etc., with a woman. No food is placed in the grave, however. In the case of a man, one or more of his best hunting-dogs is buried with him, the dog being first strangled or hung. All property put into the grave is first broken. The grave is filled in after these objects have been placed within it, and a fence is built around it, of the poles used at the dance. On these poles, baskets are placed, the poles passing through holes made in the bottoms of the baskets.[1]

The burial over, all present go and bathe and then return to the village. The house occupied by the deceased is thoroughly swept out and cleaned; and the sweepings, with much of the old paraphernalia lying about, are burned. Sometimes the fir-branches used for this fire are those worn in the dance. Occasionally the house is burned also.

In case a man dies far from home, he is buried in the local cemetery; but later, when the body has decayed, the bones are dug up, and removed to the burial-place of the person's own village. The local residents pay for having the bones exhumed and carried away. The person who digs up the bones and carries them home is considered unclean, and must fast and sweat for five days. Formerly if a man were killed, or died at a distance, he was in some cases cremated, instead of buried as just stated, and only the heart or the ashes brought home for burial.

A five-days' fast, with sweating, is also obligatory upon the grave-diggers and all near relatives, at the time of an ordinary funeral. At the end of this period, all assemble again, and hold a "cry," and then disperse to their own homes. At intervals, for a year, near relatives "cry" for the dead; but this is purely an individual matter, and is indulged in whenever desired.

For mourning, both men and women cut the hair short. The hair cut off is burned by some and by others kept carefully. In case of a widower, it is obligatory for him to keep his hair short till he remarries. The woman, in addition to cutting her hair, must put pitch and charcoal on her head and face, sometimes mixed also with a little red paint. This is worn for a year, at any rate. If she is taken as a wife by her husband's brother or relative, under the custom of the levirate, the pitch is not worn longer than this: otherwise it may be worn for several years. For the ten days after her husband's death, the widow must remain alone, and take daily sweat-baths. Widows and widowers, or parents who have lost a child, must also wear a belt made of willow-bark rolled up, or of the hair cut off in mourning (see Fig. 95).

---

[1] Goddard, op. cit., p. 71.

If a child dies within five days after birth, it is given no regular funeral, the father simply burying it alone, and then remaining, for a period of ten days, with his wife in her menstrual hut. This occasion is the only one on which a man may enter these huts. Every night the father must carry wood, and every day he must take sweat-baths. The mother has to remain in the hut for an entire month. The death of the child brings bad luck to the father, and he must therefore go frequently to the graveyard, walk about, and listen. He will then hear persons talking to him, but cannot see them. He talks to them of his luck, asks that he may hereafter have better success than before, and the voices then tell him whether or not his request is granted. He must also go out frequently at night, entirely naked, and run along trails through the hills. Should he see anything move, or hear anything cry out, or any person walking or running behind him, he must not be afraid. If he jumps or gets scared under such conditions, he will lose his luck again. He must, on these lonely night-wanderings, always return by a trail different from that by which he went.

The ceremonies held for a shaman vary little from those for other people, just described, except that some of the shaman's feather ornaments are hung up about the grave, and the rocks near by are spotted with yellow and blue paint.

RELIGION.

BELIEFS REGARDING THE SOUL. — To the Shasta, apparently, "ghost," "soul," and "life" are practically synonymous terms. Ghosts are much feared, and are seen in the form of flickering flames or vague lights, chiefly in the vicinity of graveyards. To see them brings bad luck, or even death. The ghost or soul often is thought to leave the body of a person some hours before death; and there are some persons who have the faculty of seeing these ghosts, and who are thus able to tell in advance that the person in question is going to die. The shade, on such occasions, detaches itself from the body, goes about the house (gathering up various little personal effects), and finally goes out the door and walks away. The body of the sick person may continue to breathe for hours; but in the opinion of the Shasta the life, the soul, has already gone. No shaman is able to bring back the soul, once it has left the body. Sometimes the seer, who has the gift of seeing these departing souls, may be miles away from the dying person, but yet be able to see the shade.[1] In some cases, the seers do not see the shade itself, but merely a sort of shimmering, white trail, on which dark-colored footprints form. These tracks slowly and silently approach, formed by no visible object, pass, and go on into the distance. From the characteristics of the track, the seer knows at once whose shade it is that is passing, and who it is who is about to die. In some cases, however, the soul or shade does not leave the body till death is apparent to the watchers by the body.

On leaving the body, the ghost travels slowly westward, being rejoiced on its way by the dances held at the funeral. At some point far to the west, the shade ascends to the sky, and, travelling along the Milky Way, passes eastward to the other world, which, by the Shasta, does not seem to be very clearly conceived. It is, however, a pleasant place, where food is always plenty and the ghosts make merry. There is a certain species of yellow-breasted bird which sings and whistles in a plaintive manner, and which migrates up the Klamath in the spring, and returns to the west in the autumn. These small birds are in some way supposed to come from and return to the land of the dead. Another informant gave a different belief in regard to the soul; namely that it, or the "heart," rose to the sky at once on the death of a person, and that it could be heard rising, and finally causing a dull thud or muffled boom as it struck the solid vault of the sky.

---

[1] Laflesche, Death and Funeral Customs among the Omaha (Journal of American Folk-Lore Society, Vol. II, pp. 3–12).

CONCEPTIONS OF THE WORLD. — The general ideas as to the origin and shape of the world appear to be rather vague. There is among the Shasta, so far as can be discovered, no clear idea of a creation; the world, in some form or other, having always, in their opinion, existed. Of a Creator there is little trace, and his place seems filled very inadequately by Coyote and one or two other beings; the former not as consistently evil-minded or so much of a pure trickster as among the Maidu, for example.

Five is, among the Shasta, emphatically the sacred number, and appears constantly in the ceremonials and myths, either singly or in multiple, as ten or fifteen. There seems, however, to be no trace of the fifth cardinal point found among the Maidu.[1]

The entire area occupied by the Shasta is thought of as thronged with spiritual, mysterious powers, spoken of as Axè'ki, or "pains." These are conceived of in human form (rather shorter than the ordinary stature), and as inhabiting rocks, cliffs, lakes, and mountain summits, and rapids and eddies in streams. Many animals are also regarded as Axè'ki. They are the cause of all disease, death, and trouble, and become the guardians of the shamans, and are often inherited by them.

MISCELLANEOUS BELIEFS. — If the new moon, when it rises, has the points of the crescent directed upward, there will be sickness, and no rain. If the points are turned in the opposite direction, or horizontally, there will be rain, but no sickness.

An eclipse of the moon is due to the dog that follows the moon, eating it up, People talk, therefore, to the dog, entreating it to desist, and howl and shout to frighten it away.

Splinters from a tree struck by lightning, if burned, will cause a thunderstorm. Seaweed, if brought inland, will also cause a storm, which may be averted, however, by burying the seaweed.

---

[1] See this volume, p. 264.

If children do not learn the stories that are repeated to them, they will grow up hump-backed. Boys are not allowed to eat the fat on the joint of the hind legs of the deer, or that at the back of the ears, for if they should eat it they would have weak knees and poor hearing.

If boys mock the bird known as kū'kwax, their hair will get full of lice.

If a stranger goes up on a high ridge in summer-time, and rolls about or tramples on the grass, it will rain. There is also a kind of root that grows high up in the hills. If this be burned, the sky clouds over at once, and rain will surely fall in two or three days.

If parhelia are seen near the sun at rising, it betokens war. If one of the mock-suns fades before the other, then the persistent one points in the direction of those who are to be beaten in the conflict.

SHAMANISM. — The Shasta shamans are persons of great importance in the community, and in them and their ceremonials almost the whole ritual of the people is included. So far as known, the features connected with the shamans are substantially alike throughout the Shasta area, but the description here given applies strictly, however, only to the Shasta of the Klamath River and Scott Valley.

Unlike the Maidu, the Shasta shamans are largely women. Male shamans are known, however, and are more numerous in some sections than in others. For the most part, the position of shaman is hereditary, although it does not always happen that the children of a shaman follow in their parent's footsteps. In any case, the child cannot become a shaman during the lifetime of the parent.

The first indications that a person has that he or she is to be a shaman are dreams. These dreams are of various sorts. Sometimes the ghost of the person's mother or father, or some earlier ancestor, comes in the dreams. Or the vision may be of some great rock or cliff. These dreams recur again and again, till the person becomes impressed and alarmed. In other cases, and apparently more commonly, the dream is a sort of nightmare, as of a skeleton boat, of falling from a cliff or tree, of just keeping out of the reach of a grizzly bear, or of being on a steep side-hill above a great lake, and diving into the latter from a great height; in all cases the dreamer awakening with a start just before the final catastrophe. After a more or less protracted period during which these dreams recur, the person dreams of swarms of yellow-jackets. This is regarded as conclusive evidence of the supernatural character of the dreams, as the yellow-jackets are Axè′kï, or "pains." While these dreams are occurring, the person must eat no meat, nor eat in company with people who are eating meat: indeed, not even the smell of meat cooking must be inhaled. Eating must also be done very slowly.

As soon as it becomes certain that the person is to become a shaman, he or she must at once begin to get together a number of things which every shaman must have, and must begin to paint as shamans do. If the dreamer takes no notice of the dreams, and fails to carry out the requisite food-restrictions, he or she will certainly fall ill, and, a shaman being called in to cure them, the real cause of the sickness will be discovered. Continued refusal to accept the position of shaman often results in the death of the person. The paraphernalia with which a shaman is supposed to be provided are numerous. In general, they consist of the following list: ten buck-skins, ten silver-gray fox-skins, ten wolf-skins, ten coyote-skins, ten fisher-skins, ten otter-skins, ten small dish-baskets, ten small bowl-baskets, the tail and wing feathers of the eagle (ten each), and the tails of ten yellow-hammers and of ten large woodpeckers. Other things (not necessarily in tens) are a supply of red, blue, and yellow paint, and a buck-skin pierced full of holes, to be thrown over the head while sleeping. The collection of this considerable amount of property often consumes several years; but the novice must have the list complete before he or she is allowed to attempt the cure of a sick person, or to take the part of a real shaman.

When the dreams above referred to begin, and the person is convinced that she (for, as already stated, the majority of shamans are women) is destined to become a shaman, she informs her family, and they watch her closely. She goes about her usual work for a time, and then suddenly some day, late in the afternoon, she hears a man speak to her in a clear, ringing tone of great intensity. The voice always appears to come from directly above her head. She turns at once, and sees a man standing behind her holding a bow and arrow, the arrow drawn and pointing directly at her heart. The man tells her he wishes her to sing whatever he commands, and threatens to shoot if she does not acquiesce. All of this happens so suddenly and unexpectedly, that she immediately falls senseless to the ground. While in this swoon, the woman breathes very faintly, and lies perfectly rigid and still. The family, who have been waiting for this seizure, now begin to cry and wail, and call in all the neighbors. After sunset, the woman begins to moan gently, and to roll about on the ground, trembling violently all over. It is supposed, that, while the woman is in her trance, the Axè'ki who appeared to her sings her a song, which she learns, and repeats faintly now as she moans and whines on the ground. She slowly revives, and then sings the song clearly and strongly, and in this the Axè'ki is supposed to accompany her by a faint humming. At this time he tells her his name and the place where he lives. After a time she calls out the name of the Axè'ki, and at this, blood oozes from her mouth, usually ten times in succession.

She gradually comes completely to herself, rises to her feet, and then dances, holding herself up by a rope which is hung from the roof. The next feature of the ceremony is for her to carry out the commands of the Axè'ki. She may, for example, at his request, ask those present to carry her ten times about the fire. This is done as she lies at full-length on an elk-skin, which is then lifted by four men, who carry the woman around the fire, head first, and deposit her on the ground again, with her head to the east. The circuit is always sinistral. Or the novice may ask to be swung ten times over the fire. This is done by those present stretching a rope horizontally across the house above the fire, from which rope the woman hangs by her knees (head downward, and toward the east), and is then swung back and forth across the fire ten times. This completed, she stands up and again dances, facing now the place where the Axè′ki lives.[1] She continues to repeat her song, and also other things which the Axè′ki has told her.

The day following this first ceremonial, the woman sleeps, and eats very sparingly, drinking water which has had acorn-meal stirred into it. The following night she dances again, as before; and so for three days and nights. On the third night, if she has carried out the Axè′ki's commands and omitted nothing of the dance or songs, he comes to her again. He says, "I shall shoot you with this pain (Axè′ki) to see if you are strong enough to stand it. If you are, you shall be my friend, my companion." The novice meanwhile is dancing, and when she hears the Axè′ki speak, she calls out, "He will shoot me. He is going to shoot me." The friends stand about; and when, a moment later, the novice is supposed to be shot by the Axè′ki, they rush up, and catch her as she reels and falls, stiffening again in a sort of cataleptic seizure. They must catch her before she falls, or she will die. The novice, now senseless again, is laid gently on a buckskin, and all keep very quiet. By and by she revives, and sings her song once more. Now she is supposed to have the pain shot by the Axè′ki in her body, and, getting up, she dances, and, as she does so, takes the pain out of her body, and shows it to all present. These pains, which are called by the same term (Axè′ki) as the mysterious beings who shoot them, are described generally as looking like tiny icicles. Some, however, are as much as fifteen centimetres long, spindle-shaped, and very sharp at the ends. The pain is held by the dancer in her closed fist, just the point being allowed to protrude. After a while she presses her hand to her forehead, and the pain disappears. Later the dancer stoops, and may take the pain out of her heel, for instance. She passes it into one ear, and takes it out of the other. The more powerful the Axè′ki and the greater the shaman, the larger are these pains. Finally, she puts the pain into one shoulder, and takes it out of the other. On this third night, and on the fourth and fifth nights of her dance, other Axè'ki come to the novice, and each may give her a pain; so that at the end of the five-nights' dancing she may have four or five of them. All shamans seem to have three pains at least, and to carry these about in their body all the time, one being in each shoulder, and one in the back of the head. For this reason it is very dangerous to touch or strike a shaman at these points, as to do so angers the pain, and death is likely to be the result for the person who has touched or struck them.

---

[1] The most important are said to be those living along the Stewart and Rogue Rivers in Oregon.

The five days and nights being over, the novice ceases to dance, and does not begin again till the following winter. For ten days after the dance is over, she must continue her fasting, and only at the end of that period may she again eat meat, or eat with other people. During the interval of many months which elapses before she again begins to dance, she lives very quietly, has no dreams, and does not attempt in any way to "practise" as a shaman. Meanwhile her family aid her in gathering the list of skins and other things detailed above.

When the winter period comes again, the novice announces her intention of dancing once more; and all her friends and relatives, together with an older shaman or two, assemble for the affair. Should she have been unsuccessful in getting together all the things needed, she delays the ceremony till the following year. Everything being in readiness, the father of the novice, provided he be not a shaman himself, cuts, and sets up in the ground outside the house, a pole some three or four metres high, and decorates it with paint and a few feathers. About sundown, the novice and an older shaman (often a man) go to the pole, and the novice requests the shaman to call her Axè'ki, or guardian, telling the man what words to use. The novice then returns to the house and goes to sleep, the man meanwhile calling on the Axè'ki to come. While the novice sleeps, all the guests and friends keep very quiet, and move about, if they have to, very slowly and softly. After a time, the novice begins to roll about, and whine and moan, as on the occasion of her first attack. She then gets up and sings and dances, till, about midnight, the Axè'ki arrives. As soon as this occurs, the woman lies down again and sleeps, while all the guests eat and talk quietly together. Before daylight, the Axè'ki is supposed to leave, as he must get back to his home before dawn. If the woman has more than one Axè'ki for her guardian, she asks her father to set up more than one pole, there being as many poles as the novice has guardians. The objects mentioned in the list on p. 472 must apparently be provided for each of these Axè'ki; and the objects themselves are at this ceremony piled up at the foot of the pole for the Axè'ki to see. The sleeping, dancing, and singing are continued by the novice for three nights, as above, and then, and only then, is she regarded as a completely qualified shaman.

All these dances and ceremonies are held in the novice's own house. Each of the Axè'ki whom the woman secures as a guardian tells her how he wishes her to paint for him, and each tells her a slightly different way. The shamans are usually "made," in the manner described, during the winter season; for it is then that the Axè'ki are supposed to be about, standing invisibly near the houses, watching people all the time. The Axè'ki are scattered all over the country. Some live in rocks or mountains; others, in streams or lakes; and there are also Axè'ki (or an Axè'ki) in the sun, the moon, and various stars, as well as in the rainbow. A large number of animals are themselves Axè'ki. The Axè'ki are always trying to shoot people with the pains which they carry, and for this reason ordinary people avoid the spots where Axè'ki are known to live. Even shamans dislike sometimes to go to their dwelling-places, for, if the shaman has failed to heed in every particular the commands of the Axè'ki, the latter will shoot and kill her. To the shaman, her Axè'ki friends tell everything, what to eat and when, and, in fact, prescribe her every action. Some of the Axè'ki are much more powerful than others, the most important and powerful of all living, as before stated, on the Rogue River. The more powerful the Axè'ki the shaman has as her guardian, the greater feats she can perform. As a rule, the shaman can only hold converse with the Axè'ki at night. The Axè'ki tell the shaman, in advance, when a person is going to be shot and made ill. After a person becomes a shaman, she is able to see all over the country, and discover the Axè'ki everywhere. She can also hear them singing all the time, and there are so many of them, that it sounds "like a field of locusts." A given Axè'ki is the friend or guardian of one particular shaman, and has nothing whatever to do with any one else; although other shamans can hear him singing, of course. An Axè'ki is, as a rule, hereditary in a family, being the guardian of generation after generation of shamans. Sometimes an Axè'ki may desert a family and go over to another shaman. Besides these pledged Axè'ki, there are a great number of friendless ones, — those who owe no allegiance to any family, and may, in consequence, be acquired by any shaman. These unpledged Axè'ki vary greatly in power, and, if a shaman has good luck, she may attract to herself several of these, of greater power than those inherited.

It is thought that a powerful shaman can make another person a shaman, if he or she wills. To do this, the person wishing to become a shaman lies on the ground, and the one who is to perform the ceremony stands behind him or her, holding a pain in each hand. These she points at the novice's ears, when blood is supposed to flow at once, thus "clearing the ears," so that he or she may be able to hear the Axè'ki singing. The shaman then proceeds to put a pain into the person's forehead, between the eyes, after which the person's eyes are supposed to be opened, so that he or she can see the Axè'ki. A very large fee has to be paid to the officiating shaman for these services, and then, when this stage of the ceremony has been reached, the novice has to proceed as any other novice, and as already described.

As stated already, every shaman receives from each Axè'ki a pain in the form of a small spindle-shaped object looking like ice. These are what are shot into people by the Axè'ki themselves, or by shamans, and which, on entering the body, cause disease and death. On the death of a shaman, all the pains in her possession go back to the various Axè'ki from whom they originally came, and are given out again by the several Axè'ki to the next generation of friends. It is said that the pains, on being shot into a person, live upon him, and thus cause his death. They may occupy a period of years in bringing about the death of the individual, and, the longer they remain in the body, the larger they grow. A shaman can see the pains in the bodies of other persons into whom they have been shot. When a shaman comes to a patient, her songs make the pain weak, and draw it to the surface, so that it can easily be extracted. When taken out, blood oozes from it, this blood being that of the person on whom it has been preying as a sort of parasite.

The methods of cure employed by a shaman vary according to the special case. In general, however, they are as follows. On being summoned, the shaman sets out, but stops about half a mile from where the patient lives. Here the shaman smokes, and as she (or he) does so, her Axè'ki tells her all about the case, and how long the patient is likely to live, if not cured. After a halt of about an hour, the shaman gets up and goes on to the patient's house. Friends are assembled, and the shaman dances and sings, watching the patient carefully the while. The songs are supposed to be repetitions of what her Axè'ki is saying to the dancer, and the latter tells the name of the Axè'ki by whose aid she hopes to cure the patient. The people present then say, "Kŭs ya mai'i kwa'xŏ'o ŭmtaxā'waki kwè' tirak. Kŭs i'skwa tahā'tsu kihintè'ki mai'itsi sidā' makai' idiwā'ō" ("Now thou art speaking! He lives at Umtakā'wa. Now, O person, I wish you to doctor him. You, too, are a shaman?") The shaman then rests a while, and again dances. The patient then addresses the shaman, saying, "Yī! mī'katsūgĕ idiwā'ō tĕè'kwai sdwā'hōsig. k!i''atsu i'nna. Kŭs ta'rakāyaho kwi'k!i. K!è'hanōni sti'kisi, 'kŭ'skwa yă''ă wè idiwā'ō'" ("Yī! That one, a doctor he calls himself when he talks. Look! Now underground you will be, when you say 'I am a shaman'"). The shaman at this begins to suck at the seat of pain, and sucks out some red, black, or yellow clotted substance. This is not the pain, but is done merely to "clear the system." After removing this from the patient, the shaman dances anew, approaching toward and receding from the patient, till suddenly, making a rush, she seizes the pain, and pulls it out in her hands. Sometimes the shaman exhibits the pain, sometimes not. Apparently it is not always clear and crystal-like, being described as occasionally resembling a fragment of bone or wood.

The pain, once extracted, may be disposed of in various ways. It may simply be thrown violently away in the direction of the Axè'ki who is supposed to have sent it, this motion being accompanied by a long-drawn sound resembling "brrrrrr," made entirely with the lips. In other instances, the hands holding the pain are put into a basket of warm water, and the pain left there to soak a while, with an open-work tray-basket placed over the top of the basket as a cover. After the pain has been thoroughly softened, it is taken out and placed in a half mussel-shell, with a small quantity of various herbs and roots in powdered form. Some pitch is put over the whole, the other half of the mussel-shell put over it all as a cover, and then the whole thing put in a hole in the embers, the fire being quickly raked over all. If the pain is supposed to have been sent or shot by some other shaman who is trying, either for personal revenge or for money, to kill the patient, the pain is broken. This is thought to cause the immediate death of the guilty person, and the broken pain is supposed at once to depart to the grave of its owner, and remain there. In still other cases, the shaman who extracts the pain will put it in her mouth, chew it up, and swallow it. Sometimes, instead of sucking directly at the seat of pain, the shaman places one or two eagle-feathers with their tips on the body and their butts in her mouth, and, while sucking on these, runs her hand down the feathers, squeezing out blood, which is collected in a basket of water.

New shamans rarely receive payment for their services, and only as they grow older and more experienced do they make a charge for their performances. If a patient dies, the shaman receives only half the fee; and if too many of a person's patients fail to recover, the shaman is killed, for it is believed that a shaman can always cure a patient if she only wishes to.

The shamans themselves are informed by their Axè'ki when the time comes for their death, and, as the time approaches, all a shaman's Axè'ki desert her, and no other Axè'ki will aid in extracting pains from her body, so that the shaman inevitably dies. In order to get a shaman to try to kill an enemy by shooting a pain into him, a large payment has to be made, inasmuch as it is very risky work. Shamans are supposed sometimes to send a mild pain to a village, making many persons ill; and then the shaman herself comes to the place on a visit, having prepared in this way professional work in advance.

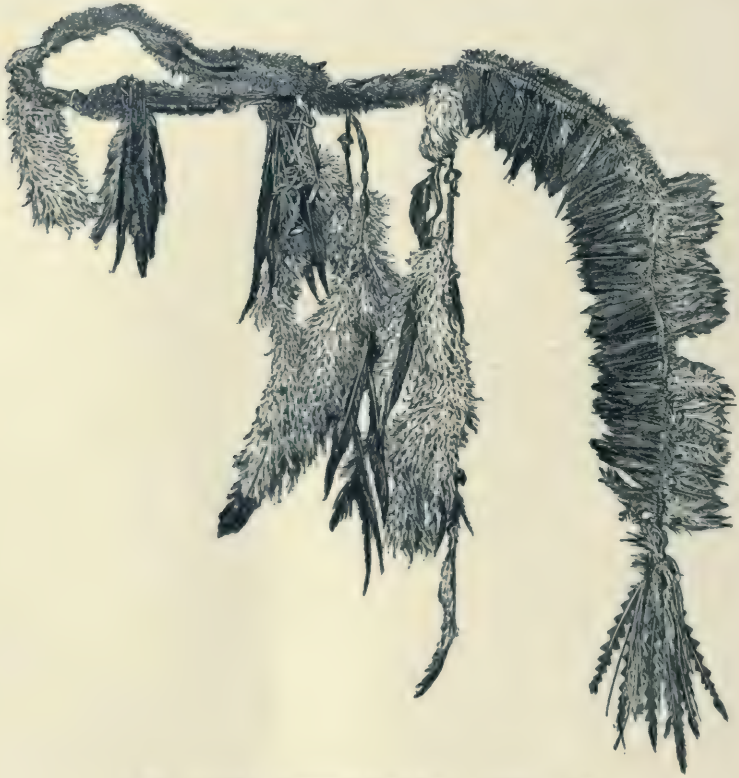


Fig. 115 ($\frac{1}{885}$). Shaman's Head-dress. Length, 114 cm.

The paints and ornaments worn by shamans while officiating vary a good deal. Yellow paint made from pine-pollen, or from that of the alder or hazel, may be used only by shamans. Blue may be used by shamans whose Axè'ki is the sun; but they also use red and yellow, painting three parallel curves from the forehead to the chin, on one side of the face (one curve of each color), the whole representing the rainbow. Other shamans put stripes, lines, and dots on the face and breast. Shamans having the rattlesnake as an Axè'ki use dust as a paint.

If a shaman has the rattlesnake as one of her Axè'ki, she wears a rattlesnake-skin bound about her forehead. Her pipe-stem is also covered with the skin, and about her neck she wears a collar of the tail-feathers of the large woodpecker, to which rattlesnake-rattles are attached. These decorations are used only when doctoring a patient who has been bitten by a rattlesnake. It is not essential to have a shaman who has the rattlesnake as an Axè'ki, under such conditions; but it is regarded as better to have one, if possible. In Fig. 115, one form of a shaman's head-dress is shown. It consists of a head-band of otter-skin, from which depends, behind, a long strip of the same skin, nearly to the waist. The head-band is decorated with a feather pompon in the centre, and pendant feathers; while the back portion falling down behind has attached to it feather bands, tassels, and pendants, together with shells. A belt worn by shamans is shown in Fig. 116. This belt is tied around the waist by strings attached to the inside of the belt, several inches from its ends, thus leaving these ends flapping behind. To the belt an abundance of shells and beads are attached, together with feather tassels. The head-dress shown in Fig. 117 may be a shaman's head-dress, or it may be one worn in one of the dream-dances which form part of the ghost-dance as it reached this section some thirty years ago. It consists of a painted buckskin band, to which are attached erect feathers, a large woodpecker's scalp and bill, rattlesnake-rattles, and pendant feathers or tassels. With this is worn the painted buckskin skirt shown in Plate LXXII. Another head-dress is shown

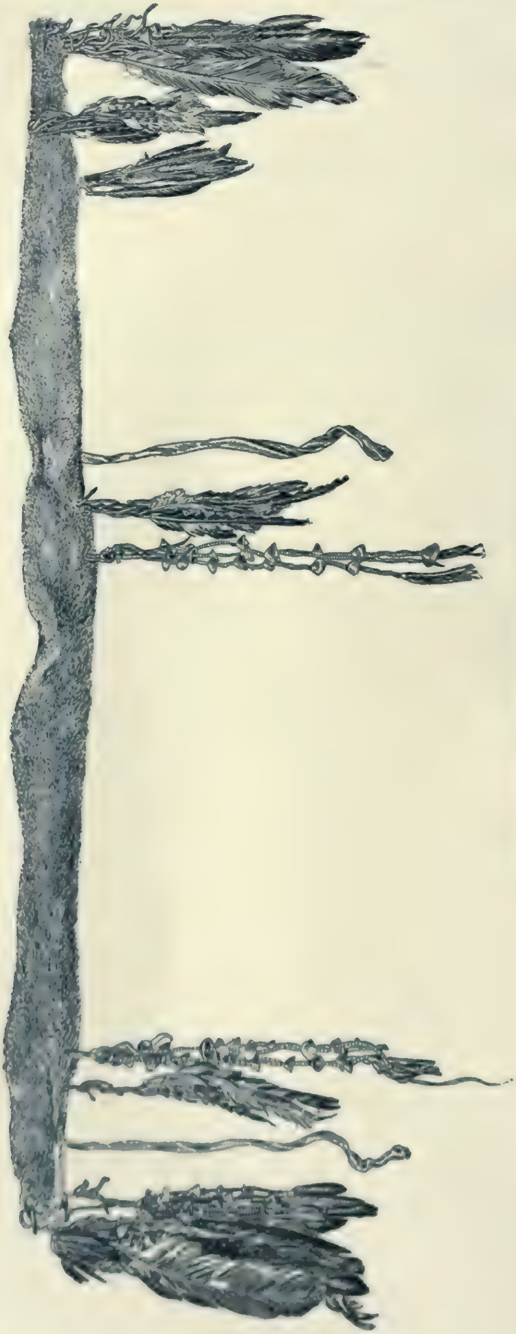


Fig. 116 ($\frac{50}{4078}$). Shaman's Belt. Length, 123 cm.

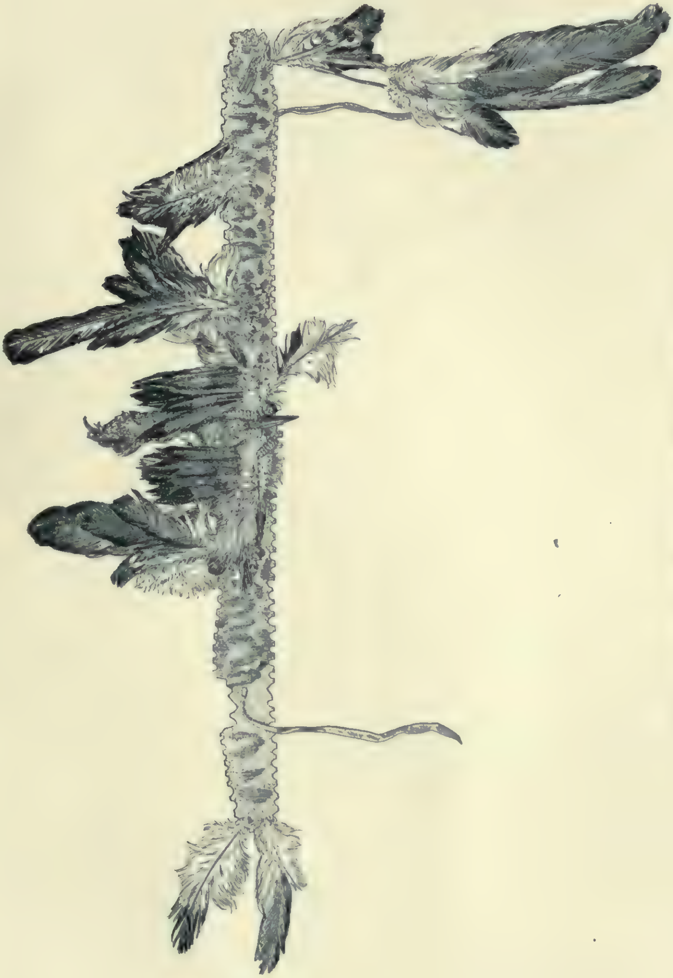


Fig. 117 (50/3190). Shaman's Head-dress. Length, 86 cm.

in Fig. 118. This is definitely declared to be worn in the dream-dance, and is made of a strip of otter-skin, to which feathers, shells, and tassels are thickly attached.

The previously given account of the ceremonial performed by the shamans seems to apply to the great majority; but those who have the rattlesnake or the grizzly bear as their Axè′ki appear to follow somewhat different lines. When the rattlesnake shaman comes to a patient who has been bitten, she first sucks out the poison, and then tells a friend of the sufferer, that she sees the rattlesnake Axè′ki, but that he is angry and will not look at her. The friend must then speak to the Axè′ki, calling him by name, and saying, "Mā i′nna sku′tayak. Karahō′pighō karisā′ya ku′tayak" ("Not that do to me. Pity me. Do good to me"). The shaman then, after a few minutes' speaking of the Axè′ki, whom she sees somewhere far away, says, "Kŭs kwā′okwāhir" ("Now he lights his pipe"). The Axè′ki is now supposed to smoke a while, and then to speak to the shaman, who reports to the patient and friend, "Kŭs kwī′′ag" ("Now he looks around"). The Axè′ki then says to the shaman, "Kī′yakahammak a′tswaxkĭ′kki ètcĕhĕ′wiyū ta′rakato i′rūtupsur" ("Hang it on the wall. Pine-bark ten earth's pollen"). This refers to the hanging-up, at this stage of the ceremony, of a sample of the beads and other things to be given as payment to the shaman for curing the patient. In addition, the Axè′ki demands for himself a piece of pine-bark on which are placed ten small heaps of puff-ball spores, which are called "pollen of the earth." The request having been complied with, the friend of the patient says to the shaman, "Kŭs i′skwa kihintè′ki. Kŭs kwi′kennūmŭk mā′mū k!ahō′tsk!ihampig" ("Now do you dance and doctor. Now I have given you the things you asked for"). The shaman then puts on the snake paraphernalia, and dances, the rattlesnake Axè′ki being supposed to dance in unison at his home far away.

If a man be bitten by a grizzly bear, the grizzly Axè′ki must be called on to cure him. As in the case of the rattlesnake, a friend of the wounded man must call the grizzly Axè′ki by name, and a dialogue similar to that given takes place.

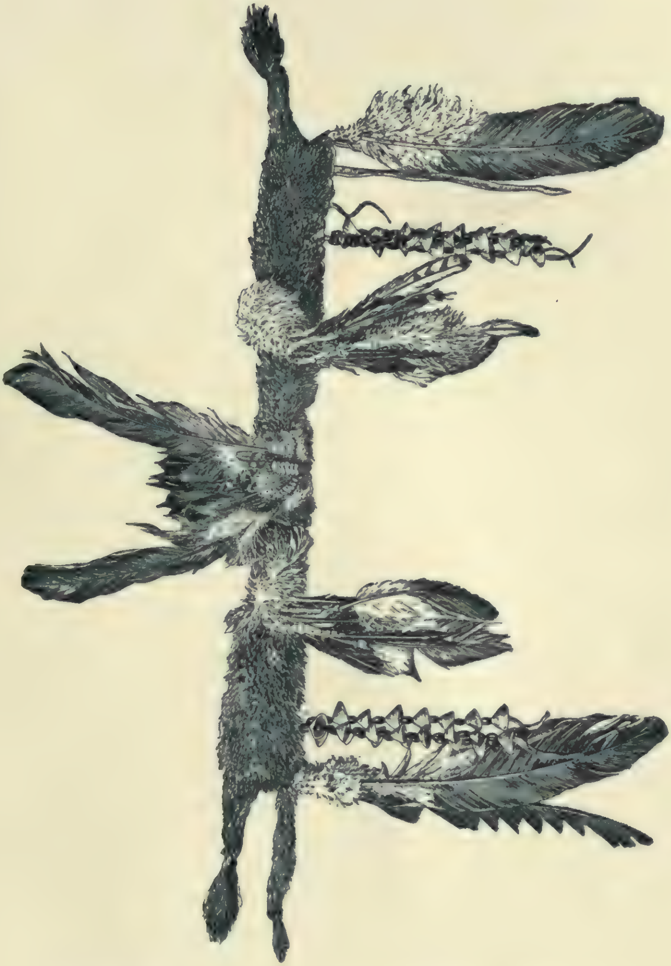


Fig. 118 ($\frac{50}{4073}$). Head-dress worn in the Dream-dance. Length, 81 cm.

Other gifts, however, must be presented in this instance. A necessary part of these gifts is a deer-hide tanned with the hair on. This the shaman tears into pieces. All the people present at the ceremonial must be in plain sight, else the shaman will jump at them, and bite and scratch them as if he were a grizzly, for the grizzly seems mainly to be the guardian of male shamans. The shaman, in dancing, growls like a bear, and acts in every way like one. He wears a collar of grizzly-claws about his neck, and has a single broad red stripe painted from the forehead, over the crown of his head, to his neck. This represents the streak on the head of the bear. He also wears a collar of feathers similar to that worn by the rattlesnake shaman. The dance of the grizzly shaman consists chiefly in five sinistral circuits of the fire, made on all-fours, in the course of which he rolls over, and turns up the stones about the fireplace, as a bear turns over logs, etc., for ants and grubs. After this, he rushes suddenly at the patient, and, pouncing upon him, seizes in his hands, and extracts, what is supposed to be the tongue of the bear that bit him. This is at once put into a basket of warm water, and later is thrown into the river.

Bites of the mountain-lion can be cured by any shaman, who extracts the tongue of the animal from the wound. As stated previously, the sun and several stars are regarded as Axè'ki, or perhaps as having Axè'ki in them. It is not clear exactly what the idea is. These are supposed to be particularly efficacious in all eye-troubles. The sun, in addition, is of much help in arrow or gunshot wounds. Each entails on the shaman somewhat different ornaments, and each requires from the patient its own peculiar gifts. Thus the morning star requires a gift of the seeds of a small white, starlike flower known as "yū'mto." Ten small piles of this must be given, and the shaman must wear a yellow mō'kus-feather, a silver-gray foxskin, and must paint a stripe of red from the forehead, down the bridge of the nose and over the chin, to the throat and breast. The evening star, on the other hand, requires ten small piles of the seeds of a brilliant red flower known as "kumpi'sna," the shaman being obliged to wear a skin as above, and to paint a horizontal stripe of red across the forehead, using as paint for this, powdered red clay, and not the red lichen used on other occasions. The sun demands skins of all kinds of land animals, and the shaman must paint with all colors, in the representation of the rainbow. There are also certain water-Axè'ki, who cause death by drowning. Here, when the relatives wish to find the body, the shaman has to dance, and the Axè'ki calls for pounded fishbones, which is set out in small dishes.

In many cases, a shaman or an Axè'ki may put a pain, or more, under the door-sill of a man's house; or the Axè'ki may station himself there, and thus try to kill all the people in that house. Or the pains may be put in a central location in a village, in order to kill all the inhabitants. When the presence of such a thing is suspected, because of much sickness, a powerful shaman is called to try to remove the source of all the trouble. On the shaman's arrival, a pole, painted in horizontal bands of red and black, is set up close to where the pains are supposed to be buried. To this pole are hung ten buckskins, ten platter-baskets, and ten small bowl-baskets, while ten hollow elder-sticks are stuck in the ground at the base of the pole. The shaman then calls her Axè'ki to come and aid her in raising the pains that are causing all the mischief. This done, she goes into the house, lies down on a buckskin, and remains there until sundown. At this time she begins to sing, rolling about on the floor meanwhile, finally standing up, and supporting herself by a rope. After some time she calls out, "Kŭs ku'kwarats" ("Now he rises on his elbow"), referring to her guardian Axè'ki in his distant home, who hears her call, slowly rises, and comes to her aid. After dancing a little longer, she speaks again, saying, "Kŭs kwŭ'kitcwits" ("Now he sits up, resting one hand on the ground"). After further dancing, she calls out, "Kŭs kwŭnnè'kwāya" ("Now he sits with his hands clasped over his knees"). Again she dances, and, speaking to those assembled, says, "Kŭs apsū'tohokwira" ("Now he reaches for his pipe"); then, "Kŭs kwa'òkwahir" ("Now he smokes"). Then, after a longer period of dancing, the Axè'ki speaks to the shaman, saying, "Kwā'tŭk āwi kusŭ'kka sā tī''ikahīruk" ("Coyote's skin, worn out, I shall wish to see when I come"). He then asks for many other things also, and these must be supplied, and piled in ten piles at the base of the pole. Everything asked for is in tens, or is divided into ten parts. All being thus arranged, the shaman calls out that her Axè'ki is coming, flying through the air. She describes his flight. He is supposed to halt halfway, lighting on a pine-tree, which perhaps breaks under his weight; he comes on again, stopping on a side-hill, and causing a rock-slide, and finally arrives at the pole to which the gifts are hung. Then the shaman speaks to him, saying, "Ru'kwāmi" ("Push with your shoulder"), bidding him thus attempt to dislodge the evil-wishing Axè'ki, or the pains buried beneath the ground. If the shaman's guardian is successful, he succeeds in pushing the pains into the river, and drowns them. In some cases, apparently, an Axè'ki himself is supposed to be thus buried, and then it is the Axè'ki, and not the actual pain, that is thus forced into the water.

Having accomplished the task set him, the shaman's guardian Axè'ki is supposed to go back to the pole, and there eats the food he has called for, and which has been placed there for him. If all that has been asked for is not there, the Axè'ki pounces on some one of the persons present, and kills and eats him instead. Meanwhile all the people present have a feast to celebrate their relief from the dangerous pains. When this is over, the shaman dances again, and the Axè'ki returns to his home. Sometimes the Axè'ki is supposed to catch cold, and so be unable to return, or to do so only with difficulty. They are supposed to be rather delicate, rarely going out of their houses, so that the exertion of coming so far makes them tired, and subject to a chill. When the ceremony is over, the shaman takes the things hung to the pole and piled about its base, and is supposed to carry them to the Axè'ki. The pole itself and the ten elder-sticks are carried by the shaman to the summit of some ridge near by, and there leaned against a tree, in the thick brush.

It is interesting to note that shamans are supposed to have the power to tell at once whether a person has done wrong in any way. They are able to do this, because, when they look at a person who has stolen, or done anything wrong, the person seems to the shaman to be, as it is phrased, "covered with darkness."[1]

Shamans never kept their feather or other dance ornaments in their houses, or within the precincts of the village, but always hid them a mile or so off, lest their mere presence should cause sickness and trouble to the people.

CEREMONIALS. — Except for the ceremonials for girls at puberty, the war-dance, and the shaman ceremonials just described, the Shasta appear to have practically nothing in the way of ritual. They have, so far as can be learned, nothing comparable to the long series of dances and ceremonies characteristic of the Maidu and other Central California peoples; nor do they have the white-deer dance, the jumping-dance, or other ceremonials characteristic of the Yurok, Karok, and Hupa. Thus, as a whole, their ritual is meagre. The Shasta near the Yurok boundary sometimes go down to attend the dances held there; but all informants are agreed that the Shasta themselves never hold them.

There are, however, one or two very simple ceremonials, whose purpose is merely to acquire luck. For example, on very dark rainy or windy nights, men go out alone, and naked, and walk all night, praying for luck, singing, seeing strange things pass them, and hearing strange voices calling.[2] Or on very cold nights in the middle of winter, a man will go out just before dawn, and, after praying for luck, will plunge into the river, and swim. There is also another method of acquiring luck, of which, however, only confused accounts have been secured. It may be practised by one man, or by several men at once, and consists, apparently, in scarifying the arms, thighs, and knees, rubbing some sort of powdered herb into the cuts, and then lying on the back in the sweat-house, and pounding the floor with one heel, singing meanwhile. This is done only in winter, and at night.

---

[1] Compare Boas, The Eskimo of Baffin-Land and Hudson Bay (Bulletin of the American Museum of Natural History, Vol. XV, p. 120).

[2] Compare ante, p. 468.

There are songs which are sung to keep away rattlesnakes and to protect one from grizzly bears. The former are known to but few persons, and those chiefly women. Once a year, in winter, some one who knows the song goes to every house, and, while the children are asleep, sings the song. The persons knowing this song are well known, and are sent for far and wide. The grizzly-bear song is different, in that it is of no avail except for the person singing it, and may be used thus only when actually threatened with danger.

Various prayers were used for help on different occasions. In war, for example, the warrior would pray, "Pè′′u, pè′′u, Kŭs ma′ii tè′dusig ō′mmakai kō′xwehä′hanōni kwi′ratāga. Kŭs xa′tcipīta kitcīai′duk i′nna tcū ā′xta ku′kwannakwahirā′ka ŭ′mmauhī′tōhō ti′tsūruxwahä′pir" ("Pè′u, Pè′u, now you I ask for aid, up above sun-chief (?) going past. Now with your rays cover me up; that blood of the sunrise, stretching out before your face, throw it over against the other side"). If a man is going out to hunt grizzly bears, he builds a fire, makes a small offering of food, leaves, etc., and then prays, first stamping on the ground twice, but without crying out "pè′′u," as before: thus, "Kŭs ma′ii tè′duhūsig wè ta′răk mā′mū yă′′had ku′nnirūxuswuk ma′ii tsā′pxo kwiti′psira mā′mu yă′′had ku′nnirūxŭ′swug" ("Now you I ask for aid, this earth your child. Drag off from me the darkness going down, your child, drag it away"). The darkness here referred to is stated to be the darkness which disappears in the west at dawn. The fire being lit, and the offerings made, the hunter continues: "Kŭs i′skwa i′mma. Tū′pahapir ma′ii wè u′tceèwa. Ka′rissa. Kŭs nĕwā′mmuk. Kŭs i′skwa ku′kwaruxwahĕ′mpig mā′mu tcī′tak mī′katsūgwĕ makai′ è′tca kadiwā′ sta′karuxwahĕ′mpiyig. Kŭs wè′kĕ kwi′tcistirĕ ki′nna araō′tō a′rawai" ("Now there is a fire. I throw it down for you a white cloud. Good it is. Now look at me. Now kick off hither the fleas, lice, etc., from your body. I hope you will kick off to me five mats. Now here I break sticks for the fire, over the leg of a deer"). Many of the allusions and expressions in these prayers are as yet not clear, and the above translation is only tentative.

Although the Shasta have no important ceremonials other than those already described, they appear to have borrowed, in comparatively recent times, some from the Wintun of the upper Sacramento and McCloud region. The dance most generally adopted appears to be the so-called "big-head dance," in which a head-dress similar to the dö of the Maidu is worn.[1] This dance is said to have been adopted by the Shasta Valley people about thirty years ago. It seems probable, however, that it was known and used somewhat before this.

The ghost-dance movement reached this section of California about thirty or thirty-five years ago, apparently. It was learned from some Modocs who came on a visit to Yreka, and was introduced to the Klamath River section of the Shasta by the father of my chief informant. The ghost-dance, for a while, caused some excitement; but this soon died down, and the whole seems now to have disappeared. In general, the character of the dance seems to have been precisely that described by Dr. Kroeber among the Yurok and Karok.[2] Every one dreamed of, and was visited by, the spirits of the dead, who gave the dreamers songs. The songs and dances were supposed to bring back the dead, who were thought to be dancing back along the path to the other world. If a person did not believe the new dispensation, he would be turned to stone, or into some animal.

MYTHOLOGY.

The mythology of the Shasta is fairly abundant. In character, it differs very considerably from that of the Maidu or Wintun, resembling more the type of the stocks of the Northwestern area as exemplified by the Hupa and Wishosk. Taking the mythology as a whole, there is little system or sequence observable. Creation myths, so characteristic of the Central Californian area, are practically absent; and the distinction between the mythical age and the present era is much less clear. The rather consistent opposition, also, between a well and an evil wishing power, so prominent in the Maidu, here fades out almost entirely.

---

[1] See this volume, p. 292.

[2] Kroeber, Ghost-dance in California (Journal of American Folk-Lore Society, Vol. XVII, pp. 32–36).

In the myths, the Coyote is a very prominent figure, and while presenting without any diminution, to say the least, his characteristics as a trickster, he occasionally plays a more dignified part, and appears as a well-wisher and helper of mankind. The trickster and culture-hero characters are thus more blended than in Central Califorina. Although Coyote is in part a destroyer of monsters, that the world may be a better place to live in, another being, known by various names, is also energetic in this line. One of the most prominent myths, told in slightly variant forms in different places, is that of the Lost Brother, in which one of two brothers is stolen by a monster. The remaining brother seeks for him far and wide, asks the sun for advice as to his whereabouts, and, after many adventures, finds the brother and rescues him, bringing him home safely at last.

As compared with the Maidu or the Wintun, the mythology of the Shasta seems quite uniform. Variants of several tales have been secured in different portions of the area occupied by the people, but the differences are comparatively small; and the whole body of the Shasta appear to have had substantially the same myths.

Comparisons of the Shasta myths in content with those of the surrounding stocks can only be made at present to the southwest, the south, and the east. With the Hupa[1] and Wishosk,[2] the only stocks of the Northwestern area from whom material is accessible, the similarities are more general than particular, although some eight or ten incidents are found which are common. With the Wintun,[3] the extent of the resemblance is about the same as that with the Hupa and Wishosk. Closer analogies exist, however, with the Yana,[3] and the closest of all with the Achomā'wi, Atsugē'wi, and Northeastern Maidu.[4] Here, on the other hand, the type of the mythology as a whole is not in accord. We have thus the Shasta mythology agreeing in general type most closely with the Hupa and Wishosk, whereas in content and incident the agreement is closer with the Yana, Achomā'wi, and Northeastern Maidu. A large mass of incidents, however, show no relation to either of these or to the Wintun.

---

[1] Goddard, op. cit.

[2] Kroeber, Journal of American Folk-Lore Society, Vol. XVIII, pp. 85–108.

[3] Curtin, Creation Myths of Primitive America. Boston, 1898.

[4] Dixon, see this volume, pp. 39 et seq.

The almost complete lack of mythological material from the Oregon stocks makes comparison to the northward, for the present, difficult. It appears, however, that as compared with the Tillamook,[1] Chinook,[2] and Kathlamet,[3] there are a number of similarities, and that these are relatively greater, and of more importance, than is the case with the Maidu. We find, for example, among the Kathlamet,[4] a myth in many ways comparable to the Shasta tale of the girl who was sent to marry the famous hunter, but who by mistake married the wrong man. The tale of the Lost or Stolen Brother is also found in a somewhat variant form among the Tillamook.[5] Several of the incidents in the Coyote tales are to be found, as well, among both the Tillamook[6] and the Chinook.[7] Although these latter incidents are found among the Maidu, still they are practically confined to the northeastern portion of the stock, which is very closely in contact with the Achomā'wi.

On the whole, then, it may be said that the mythology of the Shasta is unsystematic, and in this particular resembles more the type of Northwestern California than that of the Maidu. In content, however, the analogies are closer apparently to the southeast and east than to the west. It is also to be noted that such agreements as are to be found to the northward are more marked with the coastal tribes — such as the Tillamook, Chinook, Kathlamet, etc. — than with the peoples of the northern part of the Great Basin.

---

[1] Boas, Traditions of the Tillamook (Journal of American Folk-Lore Society, Vol XI, pp. 23, 133).

[2] Boas, Chinook Texts (Bulletin of the Bureau of American Ethnology, No. 20), Washington, 1894.

[3] Boas, Kathlamet Texts (Bulletin of the Bureau of American Ethnology, No. 26), Washington 1901.

[4] Op. cit., pp. 20–24.

[5] Op. cit., pp. 136–138.

[6] Op. cit., pp. 140, 141.

[7] Op. cit., p. 101.

CONCLUSION.

From the foregoing description of the culture of the Shasta, certain general conclusions may be drawn. As a whole, the Shasta may be said to occupy a somewhat intermediate position between the cultures characteristic of Northwestern California, of Central California, and of Southern Oregon. Agreeing more or less closely with the Hupa, Yurok, and Karok of the Northwestern area in much of their material culture, they yet differ widely and fundamentally from them in much of their social organization and religious life. The differences are, I believe, too great to warrant us in including the Shasta as members of the clear-cut culture of the Northwestern area. Even less do they show the characteristic features of the Central culture area, with its circular, semi-subterranean, earth-covered lodges, its high development of basketry, its loose social organization, its elaborate religious ceremonials, and well-developed creation myths. The Shasta thus appear to occupy a somewhat isolated position as regards the typical Californian cultures, to be, indeed, un-Californian in their general characteristics, and probably more closely affiliated with the as yet little-known culture of Southern Oregon.

Thus the conclusions to be drawn from the culture of the Shasta, as a whole, seem to corroborate the somewhat uncertain traditions as to a former considerable extension of this people to the northward.

The existence of fragments of three more or less well marked dialects about the periphery of the area occupied by the major portion of the Shasta, suggests the thought that possibly these might represent the remnants of an earlier branch of the stock more thoroughly Californian in its culture and characteristics. The present main body of the Shasta, then, might be regarded as a comparatively recent wave of immigrants, from the Oregon side of the Siskiyous, who had overwhelmed those members of the stock who were earlier in occupancy, and brought in a larger element of Oregonian culture.[1] This is, and must probably always remain, a mere hypothesis; for the data requisite for its verification have mainly disappeared. Nothing virtually remains of these fragmentary groups speaking different dialects, and we are therefore unable to make any comparisons of their culture with that of the present main body of the Shasta, or the surrounding stocks. The meagre information in regard to the Konomī′hu given in the appendix is, it must be confessed, as much opposed to this theory as it is in favor of it. It is not impossible that investigations now in progress among the Achomā′wi and Atsugē′wi, the two eastern members of the Shastan stock, may aid in this matter, and that more searching linguistic studies than have yet been made may also throw some light on this question, which must for the present be left undecided.

---

[1] Dixon, The Mythology of the Shasta-Achomā'wi (American Anthropologist, N.S., Vol. VII, p. 612).

APPENDIX.

THE KONOMĪ′HU. — In the summer of 1903, what appears to be a hitherto unknown branch of the Shasta was found to have formerly occupied a small area about the Forks of Salmon River.[1] Acting on information from Dr. A. L. Kroeber and Dr. P. E. Goddard of the University of California, in regard to what they supposed was a slightly different dialect of Shasta, it was discovered that, although at present a Shasta dialect is spoken in this vicinity, formerly it was occupied by a people calling themselves Konomī′hu, and speaking a very different language. The last survivor of these people died in 1901, and only the following very fragmentary information could be secured.

The area occupied by the Konomī′hu extended, from the Forks, some seven miles up the South Fork, and five miles up the North Fork, of the Salmon River. They lived, for the most part, in a single village on the right bank of the South Fork, a few hundred yards above the Forks itself. Their houses were round bark huts with a conical roof, the floor of the house being excavated some half-metre below the surface of the ground. The houses had a door at one side and a smoke-hole in the centre of the roof. There were no dance-houses, nor were houses built that were like those of the Yurok or Karok. The Konomī′hu dressed in buckskin robes, leggings, and skirts, much fringed, and decorated with both shell and beads, and with painted designs in black, white, and red. These leggings and robes were much traded to the Shasta of Scott Valley. No baskets were made, all being obtained by trade. Buckets of skin, with a wooden hoop for a rim, were much used. Platters and trough-shaped vessels of stone were used for various purposes, and spoons of elk-horn and wood. Their food was fish, game, and acorns; the latter being pounded in wooden mortars made from a trunk of a tree. No nets were used in fishing, only spears. They did not use a pack-basket, but a large buckskin bag carried by means of a tump-line. The Konomī′hu traded with the Shasta for disk-shaped shell beads, and with the Karok for dentalia, and had but little contact with the Hupa. They intermarried with the Shasta of Scott Valley to a considerable extent. Nothing resembling the dances characteristic of the lower Klamath was known to the Konomī′hu. The Coyote was thought to have created the world. There was no tradition of migration. The dead were buried.

---

[1] Dixon, The Shasta-Achomā′wi: A New Linguistic Stock with Four New Dialects (American Anthropologist, N.S., Vol. VII, pp. 213–217).

From this fragmentary account, it is evident that the culture of the Konomī′hu was substantially in accord with that of their neighbors, in particular the Shasta, but that in some features there was a difference. This discrepancy was, however, very much greater from the linguistic point of view, as will be apparent from the short vocabulary which follows. This was secured with some difficulty, and consists merely of the miscellaneous words which my informant was able to remember as having been used by her grandfather, a Konomī′hu, in her girlhood, some thirty years before. In only one or two cases are there recognizable similarities with any other language in the region, and these are with Shasta or Achomā′wi. The whole feeling and sound of the language is, however, very much like the Shasta, and it has therefore been tentatively classed as belonging to the Shastan stock. Inasmuch as this brief vocabulary, however, is probably all that can now be secured of this language, it was thought best to publish it here in full, in order that it may be accessible to linguistic students.

Hand	ki′poman
Legs	kahā′masākanā′tsxsu
Eye	ki″oi
Hair	t!ā′wai
Head	kī′na
Back	kī′kīwatitxop
Indian	kis′apuhī′yu
Wild Indian	iksin′ahutqe
Fox	ki′putska
Ground squirrel	kī′pnikawats
Grizzly bear	kāmkā′tsinèau
Coyote	qōmū′tsau
Frog	k!uts′watin
Bat	kitcŭm′uni
Salmon	yā′nni
Newt	tapā′kan
Trout	sa′hawai
Lake	t!in′apxau
Water	kum′ma
Sand	kit′!uts
Mountain	kip
A flat	pā′wi
Saddle of mountain	hè′mau
Pinnacle of rock	tī′poi
House	in′nnokwayig
Stone	qwā′sunip
Creek	kinapxig
A ford	hau′na
Night	qummā′t′t!au
Trail	k!enōm′
Obsidian	k!e′tspai
Hazel	xas′kipāma
Wild onion	ta″awanak
Wild onion, another variety	kwan′apxo
White fir	sa′maka
Cedar	kin′axo, qoā′
Brush, bushes	ki′tsa
Spruce	qohī′ma
Stingy	kŭxiwī′wi

Straight	is′abunnatŭtsŭ′kum
Ugly, bad-looking	atanè′wig kip′xawi
High	pāk′wai
Eat	tammā′hawĕ
Come down!	kipā′k’hau
Who licked that off?	tcapā′ti nip′’nit t!aiās′
Who cut that off?	tcapā′ti tāxès′
I’ll hit you	assè′hèpannahap
I am sorry	ai′yukiyātc
Let’s run a race!	qwa′hapūās
I’ll run too	k!wi′himati ts!a′ts!au
Look up this way!	qōhī′ma qwā′ma
I met him there	qī′si put′sup
Cedar is soaking	kin′axo k!ū′patsipā′qua
Where do you come from?	tcā′ma hāyi
Come here!	ma′tikina
Get down!	k!ihī′tsinnihauwĕ
Look over!	kis′nitiknīma
Go away!	kī′ts!iyatsau
Who is that?	kīpa′ha’po
I’m afraid of him	kip′isinikwai
Go away! I’m just going to hit you	yīs′anamnās yās′amati tcapātitakya

INDEX.

Abalone, 141, 396.
Abella, Padre, 129.
Acorn, live-oak, 426; preparation of, for food, 184–187, 425, 426; pulverization of, 135, 176; varieties of edible, 181, 423; white-oak, 426.
Acorn-bread of Maidu and Shasta, difference between, 426.
Acorn-meal, extraction of bitter principle from, 186, 187, 425, 426.
Acorn-mush, manner of eating, 180.
Acorn-soup, 187, 426.
Affiliation of different stocks, 25, 26.
Ā'ki dance, 286, 304–306.
Alō'lingkasi dance, 301, 302.
Angle-worms, gathering of, 191.
Argüello, Don Luis, 129.
Armor, kinds of, 205, 438.
Arrow, the, holding of, 204; making of, 203; of the Shasta, 438.
Arrow-point, protection of, 204.
Arrow-poison, 204, 332.
Art, Maidu, 218–220; multiple origin of, 29; preponderant realism of Salish, 30; Shasta, 446–450.
Axĕ'ki, 393, 470, 473–488.

Bancroft, H. H., 390.
Barrett, S. A., 121, 245, 247.
Basket-making by the Indians of California, 1.
Basketry, arrangement and grouping of designs on, 12, 16, 18, 23; coiled, 145–147; color of background for Maidu designs on, 8; conventionalization in Maidu and Pit River designs for, 13, 17; in different stocks, identity and meaning of designs for, 25; horizontal bands in Wintun designs for, 19; influence of type of basket on designs for, 11, 16; material for, 145, 399; number of Maidu designs for, 13; paucity of vertical lines in Wintun designs for, 18; spiral arrangement in designs for, 14, 17; twined, 11, 145, 147, 400; use of dyed warps for ornamentation of, 401.
Basketry designs, animal tracks, 9; arrow-feather, 7; arrow-point, 8, 9, 10, 11, 12, 15, 16, 21, 22, 27, 28; bead, 10; bear's-foot, 15; "bent knee," 15; big-tongues, 4, 9, 12; black-oak, 5, 7; buckeye, 20; buckeye-tree, 22; butterfly, 4, 448; caterpillar, 3; characteristics of the Maidu, 14; characteristics of the Pit River, 17; characteristics of the Pomo, 24; characteristics of the Wintun, 18; community of, 27; "crossing trails," 21, 22; "crossways," 18; crow's-tracks, 22; "dau," 22, 24; deer-excrement, 16, 18, 19, 28; deer-gut, 10, 15, 16, 18; deer-rib, 15, 16; diamond, 3, 19; distribution of, 12, 16, 25; duck's-wing, 3, 12; earth-worm, 3, 10, 12, 19, 28; "empty spool," 5, 18, 22; eye, 3, 16, 19; feather, 7, 8, 10, 11, 12, 13, 28, 30; fern, 6, 10, 11;

fish-tail, 15; fish-teeth, 4, 11, 12, 13, 30; flint, 8; "flint goes around," 447; flower, 6, 12, 28, 30; fly, 4; flying geese, 15, 16, 18; frog's belly, 448; grasshopper-leg, 5, 11, 12; gray squirrel's-foot, 4, 12; house, 19; "it goes round crooked," 448; "it goes round one way," 448; "leaves strung along," 18; lizard, or lizard-foot, 15, 16; longko, 3; meadow-lark's neck, 15; "meshes in fishnet," 21, 22; milleped 4, 12, 13, 30; moth-miller, 5, 11, 12; "mountains and clouds," 9; mussel's-tongue, 14, 15, 448; owl's-claw, 16; "pair of tongs," 10; pine-cone, 5, 6, 15, 22; plant, 6; "pulled around," 18, 448; quail, 15; quail-tip, 3, 8, 11, 12, 13, 19, 20, 30; raccoon, 5; rattlesnake, 4, 12, 18, 19; "red mountains," 20, 21, 22; "rough," or "crooked," 16; salmon-heart, 448; of the Shasta, 447; skunk, 14, 448; skunk-nose, 16; "something turning round," 9; "spotted skin of fawn," 20; "striped," 18; sucker's-tail, 18; sugar-pine, 6; trail, 10; tree, 6, 12; universal in use, 12; variation in, 11, 16; vine, 6, 11, 12, 28; water-snake, 4, 10, 12, 18, 19, 28, 448; white-oak, 7; wolf's-eye, 18, 19; "wood in billets," 9, 448; "wood set up around," 447; yellow-pine, 6; zigzag, 9, 20, 21, 22.

Baskets, African, 28, 31; for cooking, 179, 422; for storage, 177, 422; for transportation, 199, 435; types of Shasta, 399; universal use of, 177–180.

Bead-work, 219.

Bear dance, 286, 295, 296.

Bear-hunt, 194.

Bear-meat, eating of, 191.

Beard, plucking out of, 163.

Belt of Shasta woman, 413.

Berlin, Königliche Museum für Völkerkunde, 28.

Berries, as food, 182, 189, 424, 427; preparation of, for winter use, 189, 427.

Bibliography, of the Maidu, 122; of the Shasta, 383, 384.

"Big-head dance," 491.

Birth-rate of Central Californian Indians and of other parts of continent, comparison between, 357.

Births, table of, 380.

Blankets from skin, 148.

Boas, Franz, 38, 40, 62, 69, 71, 79, 100, 218, 336, 341, 342, 489, 493.

Body-painting, 167, 412.

Bone and antler, use of, 140, 396.

Bonneville, B. L. E., 129.

Bow, the, holding of, 204; inadequate knowledge regarding Shasta, 436; making of, 202, 203; manner of playing musical, 223; peculiar type of, 436, 437.

Burial customs, 241–259, 465–468.

Burning-ground, preservation of, 246; use of membership string for, 246–248, 257.

Burns, L. M., 39, 67, 90.

California peoples, type of, 343, 346.

Canoe, of the Maidu, 140; of the Shasta, 396, 432.

Cap, making of netted, 143–145; use of netted, 34, 159, 160, 268, 324, 327.

Captives, torture of, 206, 207.

Carving, 219, 220, 449.

Cedar-leaves, medicinal properties of, 183.
Ceremonials, 283–322, 489–491; for acquisition of luck, 489, 490; of "burning," 245–259; Maidu religious, 35; ornaments worn in, 283–285; two types of dance in, 285.
Charms, 266; for causing death, 272.
Chesnut, V. K., 347, 349, 359, 361, 365, 368, 372, 374.
Child, still-born, 230, 455; superstition as to death of, 468.
Child-birth, customs at, 229, 230, 454, 455.
Children, naming of, 230–232, 456; treatment of hair of, 456, 457.
Clothing, of the Maidu, 34, 154–162; of the Shasta, 407–412.
Cloud-Spirit, 306.
Clover as food, 183.
Clown, 271, 273, 274, 286, 297, 304, 310, 315–318, 326.
Club, stone-headed, 204.
Combs, kinds of, 163.
Community, head man of Maidu, 223, 224; head man of Shasta, 451, 452.
Concepts, multiform expression for, 218; wide distribution of, 218.
Contact and environment, effect of, 34.
Cordage, manufacture of, 142, 398.
Coyote, in mythology, 37, 38, 83–94, 334–337, 492; success of, 337.
Coyote dance, 286, 296, 297.
Cradle, final disposition of, 455.
Cradle-frame, 200, 435.
Creeper dance, 298, 299.
Crime, 227, 453.
Crows, netting of, 196.
Culture and environment, harmony between, 346.
Currency, kinds of, 397.
Curtin, J., 38, 42, 65, 67, 71, 79, 80, 93, 97, 338, 340, 492.

Dance-ceremonial, the ă'ki, 286, 304–306; the alŏ'lingkasi, 301, 302; Bear dance, 295, 296; "big-head dance," 491; Coyote dance, 286, 296, 297; Creeper dance, 298, 299; Deer dance, 302–304; Duck dance, 292–295; Feather dance, 321; four, sacred number in, 287; the hĕ'si, 288–290; impersonation of supernatural beings in, 308, 309; the ka'udom sökö'ndom, 320; the lo'li, 291; the mo'lokongasi, 302; origin of the lū'yi, 290, 291; purpose of animal, 285, 286; the sala'lungkasi, 291; season for, 288, 308; Sweat dance, 321; Turtle dance, 299–301; the wĕ'daböyem, 318–320; the yŏ'ngweda, 307.
Dance-house, ceremonies at building new, 309–315; main post of, 286, 287, 310.
Dances, of the foot-hills, 311–318, 322; of northeastern Maidu, 318–322.
Dead, the, "burning" in honor of, 36, 245–259; restriction regarding name of, 232, 456.
Death, the first, 44.
Decimation of the Maidu, 131.
Decoration by painting, 220.
Deer, hunting of, 192–194, 431.
Deer dance, 302–304.
Dentalia, 141, 396, 397.
Designs, common origin of, 32; incised, 220; independent development of, 28, 32; origin of, in the mind of primitive man, 31; significance of geometric, 29.

Dialects of the Maidu, 33.
"Diggers," 123, 182.
Divorce, 241, 464.
Dorsey, 100, 445.
"Dreamer," 271, 283.
Dreams, on night of tattooing, realization of, 413; shamanship foretold in, 275, 471; at time of puberty ceremonial, 458.
Duck dance, 292–295.
Ducks, snaring of, 195, 196.
Durham, 125, 181, 263, 344.
Dwellings, 168–176, 413–418.

Eagle, shooting of, 195.
Earthquakes, cause of, 263.
Eels, preparation of, 191.
Emmons, G. T., 389, 390, 436.
Epidemic, procedure of shaman in, 487, 488.
Exploration in the country of the Maidu, 129.

Farrand, L., 29, 30, 39, 69, 100, 342.
Feather dance, 321.
Feather-work, 149–154, 219, 403–406, 448.
Fernald, M. L., 121.
Fir-leaves, medicinal properties of, 183.
Fire-drill, 180, 181, 422.
Fish, 184, 196–198, 425.
Fish-hook, 198.
Five as a sacred number, 264, 470.
Flint, rich deposit of, 132.
Flute, 221.
Food, animal, 183, 184, 424; berries for, 182, 189, 424, 427; common receptacle for, 177; leaching of, 187; seeds for, 138, 183, 424; storage of, 176, 177, 184, 422.
Food-supply, 181–184, 388, 423–425.
Football, for men, 207; in the Sacramento Valley, 208; for women, 208.
Four, sacred number in dance, 287.
Framboise, Michel la, 129, 389.
Fruits, extraction of bitter principle from, 187, 188.

Gairdner, 389.
Gambling dance, 299.
Game, division of, 198, 432.
Games, 207–217, 441–446.
Gatschet, A. S., 39, 79, 341, 385.
Geese, snaring of, 195, 196.
Ghost, death predicted by sight of, 469; directions given by, 272; travels of, 260, 261, 262, 469; warding off, 262.
Ghost-dance, 491.
Goddard, P. E., 341, 398, 400, 401, 409, 411, 418, 421, 422, 435, 445, 449, 467, 492, 495.
Gold-find in California, effect of, on country, 389.
Good and evil, parting of the ways for, 261.
"Grass fight," initiation ceremony ended by, 327.
Grass-game, 209–216; diagram for, 212, 213; in the foothill region, 216.
Grass-seed, cooking of, 189; as food, 183; gathering of, 188.
Grasshoppers for winter food, 190.
Grouse, taking of, 195.

Hair, manner of wearing, 163, 412; treatment of children's, 456, 457.
Henley, 131.
Hĕ'si dance, 288–290.
Hide, preparation of, 141, 397.
Hŏbo', 172, 173.
House-furnishings, 176, 418.

Houses of the Maidu and Shasta, comparison between, 420.
Hunting, 192–196.

Infant, device to insure good-nature of, 455.
Initiation into Secret Society, 325–327.

Johnston, Adam, 131.

Ka'udom sökö'ndom dance, 320.
Knives and spear-points, manufacture of, 133, 134.
Knots, marking time by, 228, 248, 271, 312, 318.
Konomī'hu, account of, 496; habitat of, 495; vocabulary of, 497, 498.
Kotzebue, Otto von, 438.
Kroeber, A. L., 29, 39, 65, 84, 100, 341, 349, 400, 401, 447, 448, 491, 492, 495.

Labor, division of, 227, 452.
Laflesche, 469.
Langsdorff, G. H. von, 438.
Languages, origin of, 44.
Liston, H. F., 121.
Litchen, Conrad, 383.
Locusts for winter food, 190.
Lodge, earth-covered, 168–172, 174.
Lo'li dance, 291.
Longko, 3, 9.
Luck, means of acquiring, 468, 489.
Lū'yi dance, 290, 291.
Lying, adage regarding, 228.

McArthur, D. D., 383.
McKee, 390.
McKoin, J. J., 383.
Maidu, the, bibliography of, 122; clothing of, 34, 154–162; conventionalization in designs of, 13; designs on baskets of, 3–14; differences in sections of, 128, 343, 345; habitat of, 2, 33, 123–125; history of, 129, 130; measurements of, 358–364, 374, 375; moral status of, 240; mythological classification of, 342; names for, 123, 128; nature of mythology of, 343; use of single design for each basket by, 14; variation in culture of, 322.
Man, name of first, 42.
Manzanita-berries, 182, 423.
Manzanita-cider, preparation of, 189, 190, 424, 426; vinegar from, 190.
Marriage-customs, 239–241, 461–465.
Mason, O. T., 20.
Mats, 148, 177, 403.
Measurements, abbreviations used in, 358; average, 356; of Half-Breeds, 372–378; of Hat Creeks and Pit Rivers, 364; of Maidu, 358–364, 374; of Maidu Half-Breeds, 374, 375; of Pit River Half-Breeds, 376; of Piute, 365; of Pomo, 365–367; of Pomo Half-Breeds, 376, 377; of Wintun, 372; of Wintun Half-Breeds, 378; of Wintun and Yuki mixed, 372; of Wylackie, 372; of Yokut, 372; of Yuki, 368–371; of Yuki Half-Breeds, 377, 378; of Yuki and Pomo mixed, 368; miscellaneous, 378; tables of anthropometrical, 348, 349, 350–355, 356.
Meat, cooking of, 191, 427, 428; drying of, 191, 427.
Metate, 138, 177.
Migration of the Maidu, 132.
Milky Way, 261.
Miller, Joaquin, 389.
Milling-basket, 177.

Mistletoe, medicinal properties of, 183.
Mofras, Duflot de, 390.
Mo'lokongkasi dance, 302.
Moon, belief regarding spots on, 76, 266; eclipse of, 470; new, 470.
Moons and their meaning, 217, 218.
Mortars, 135–137, 220, 327, 391, 393, 394.
Mortar-slabs, 135, 176.
Muller, 138, 177.
Murder, punishment for, 227, 453.
Music, instrumental, 221, 449; vocal, 223.
Musical instruments, 221–223.
Mustache, plucking out of, 163.
Mythic era, synopsis of, 334.
Mythology, the creation in, 335; differentiation of American and Indian, 336; distribution of similar incidents in Indian, 38; diversity not comparable with extent of territory in Maidu, 338; fundamental ideas of, in varying stocks, 339; incorporation of foreign elements into Indian, 38; of the Maidu, 333–342; migration tradition in, 337, 344; of the Shasta, 491–493.
Myths, among different stocks, comparison of, 340; Bear and Deer, 79–83, 113; Big-Belly's Son, 102–105, 117; the Cannibal-Head, 97, 98, 116; the Conqueror, 51–59, 111; Coyote Tales, 83–94, 113; Creation, 39–45, 110; Earth-Namer, 46–51, 110; Fish-Hawk and the Two Deer-Ticks, 94, 95, 115; Huptoli, 102, 117; Kū'tsem yĕ'poni, 59–65, 111; Lizard and Grisly-Bear, 99, 100, 116; the Loon-Woman, 71–76, 112; Mountain-Lion and his Wives, 105–109, 118; Mountain-Lion, Robin, and Frog-Woman, 96, 97, 116; Search for Fire, 65–67, 111; Skunk and Beetle, 100, 101, 117; the Stolen Brother, 98, 116; Sun and Moon, 76–78, 113; Thunder and his Daughter, 67–71, 101, 102, 112, 117; To'lowim-Woman and the Butterfly-Man, 95, 96, 116; Wolf makes the Snow Cold, 101, 117.

Nets, manufacture of, 143–145.
Nuts as food, 182, 423, 426, 427.

Oaths, unknown to the Maidu, 227.
Obsidian, abundance of, among the Shasta, 391.
Ogden, 129.
Ornaments, 164–166, 413.

Pestles, 137, 177, 392–394.
Petitot, 100.
Pigeons, snaring of, 195.
Pine-bark, medicinal properties of, 183.
Pine-nuts, 189, 423.
Pipe, stone, 138, 392, 394; wooden, 395.
Pit Rivers, the, conventionalization in designs of, 17; designs on baskets of, 14–17; grouping of designs by, 17; habitat of, 14; influence of type of basket on designs of, 16; measurements of, 364, 376; short heads characteristic of, 356.
Piute, the, measurements of, 365.
Plants, medicinal, 183.
Poison, impregnation of liver with rattlesnake, 205; purification from, 274.
Pomo, the, artistic poverty of, 24; combination of designs by, 21, 24; conventionalization in de-

signs of, 24; designs on baskets of, 20–24; feather decoration by, 20, 23, 31; habitat of, 20; influence of weave on basket designs of, 23; manual dexterity of, 24; measurements of, 365–368, 376; paucity in number and variety of designs among, 23; resemblances to peoples of Nevada and Utah found in, 356; several designs used on one basket by, 24.
Pounding-stones, 135, 176.
Powell, J. W., 37, 39, 123.
Powers, Stephen, 39, 40, 51, 79, 123, 125.
Prayers, 490.
Prisoners of war, 206, 207, 441.
Property-rights, of the Maidu, 224–226; of the Shasta, 452.
Puberty ceremonials, of the Maidu, 232–238; of the Shasta, 457–461.
Pulverization, manner and means of, 135.
Putnam, F. W., 347.

Quail, snaring of, 195.
Quiver, skin for, 203.

Rabbits, taking of, 195.
Rand, 342.
Rattles, 221, 222, 449, 450.
Rattlesnake, superstitions connected with the, 266.
Realism, obscure, 13, 30.
Realism and decoration, differentiation of, 29.
Relationships, table of, 379.
Religion, 259–322, 468–489; dominant figure of Maidu, 343.
Riggs, 342.
Rock-painting, 449.
Roots, as food, 182, 424; gathering and preparation of, 189.
Royce, 124, 387.

Sacred number, 264, 287, 470.
St. Petersburg, Imperial Academy of Sciences at, 438.
Sala'lungkasi dance, 291.
Salmon, first catch of, 198, 430; preparation of, 427; superstition regarding speared, 430; taking of, 196, 197, 428–430.
Salmon-net, 197, 428.
Salt, procuring of, 191, 427.
Santa Barbara, relationship of Yuki to the ancient inhabitants of, 357.
Sargent Sambo, 383.
Scalping, 206, 441.
Schoolcraft, 390.
Scott Valley, 388.
Seasons, 217.
Secret Society, the, age for membership in, 324; ceremony of initiation into, 325–327; circumvention of wrong-doing by initiation into, 325; duties of leader of, 323, 328, 330, 332; election of leader of, 328–330; importance attached to membership in, 323, 324; local branches of, 324, 327; of the Maidu, 322–333; selection by spirits of initiates for, 325; time for initiation into, 325.
Shade-roof, 174.
Shaman and "dreamer," differentiation of, 271.
Shamanism, 267–283, 471–489; gift of, not wholly ancestral, 267; punishment of disbelief in, 282.
Shamans, acquisition of powers of, 267, 268, 275–279, 472–476; annual dance of, 272; death caused by, 269, 280; detection of evil-doer by, 488; dialogue between clown and, 315, 316; disposal of ornaments and rattles of, 279; as dominant

figures in religion, 343, 471; fasting by, 279; fee of, 479; female, 269, 274, 471; guardian spirits for, 278, 476; kinds of, 271; as members of Secret Society, 324–333; method of cure by, 478; objects extracted by, 270; office of, hereditary, 274, 471; ornaments of, 283, 481; paraphernalia of, 472; penalty for rejection of office of, 472; powers of, 279; supremacy of, 267; test of eligibility for, 333; vulnerable parts of body of, 475; wands for, 275, 278.
Shasta, the, bibliography of, 383, 384; clothing of, 407–412; creation myth of, 339; cultural isolation of, 494, 495; habitat of, 386, 387; indigenous to California, 391; meagre ritual of, 489; names for, 385, 388; origin of the name, 384; topographical division of, 388.
Shasta and Achomā'wi, affiliation of, 385.
Shasta Valley, 388.
Shell, use of, 141, 396.
Slaves, 206, 441.
Sling, use of, 204.
Smith, Jedediah, 131.
Smoke-signals, 207.
Soapstone, vessels made from, 139, 393.
Social festivals, 228.
Social organization, of the Maidu, 35, 223–227; of the Shasta, 451–453.
Songs for warding off danger, 490.
Soul, beliefs regarding, 259–262, 468, 469; "ghost" synonymous with, 468; "heart" synonymous with, 259; "life" synonymous with, 468.
Spear, 204.
Spell, manner of casting evil, 331.
Spencer, D. L., 121, 206, 225, 245, 323.
Spirits, removal of spell by, 332; selection of candidates for Secret Society by, 325, 329.
Squirrel, shooting of, 195.
Stars, telling time by, 330.
Stock, designs characteristic of each, 27.
Stone, objects of, 132–139, 391.
Stories, told in daytime, effect on narrator of, 266.
Storms, prevention of, 265.
Superstitions, 195, 230, 262, 265, 266, 309, 430, 468, 470, 471.
Sutter, J. A., 129.
Sweat dance, 321.
Sweat-house, 418–420; ownership of, 420; uses of, 420.
Sweet-bird seed, preparation of, 189.

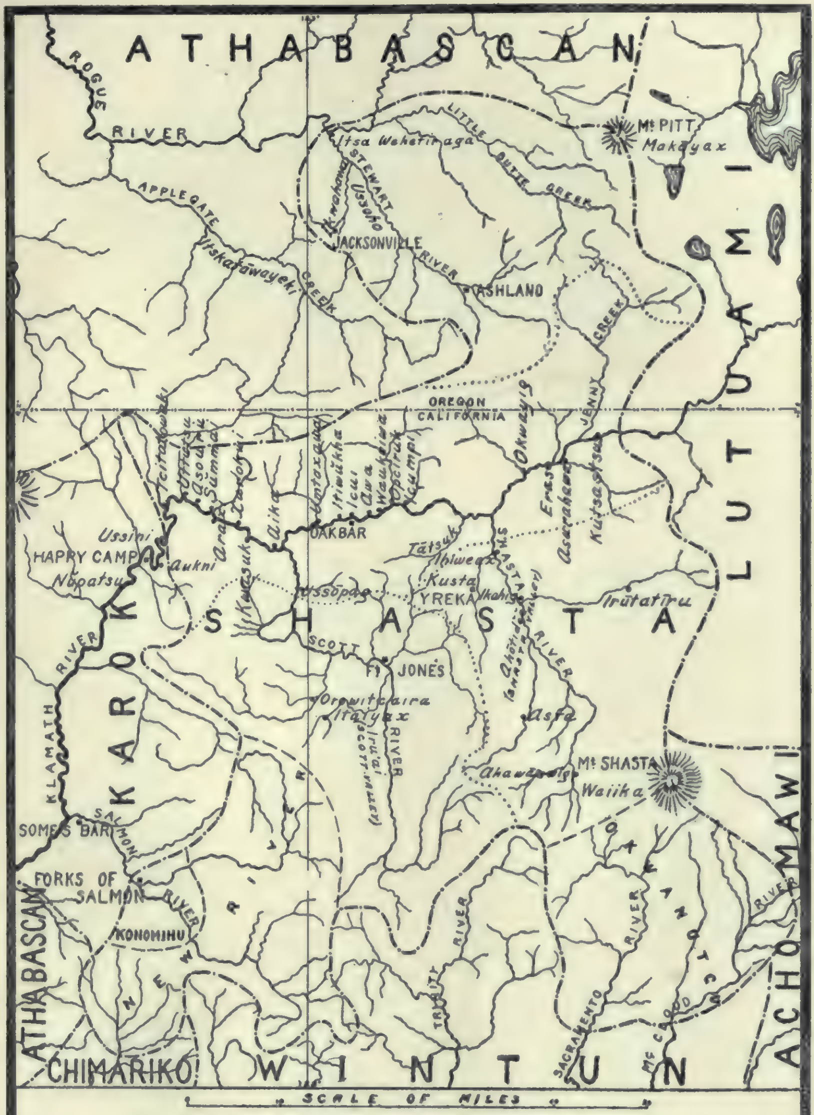
Tables of anthropometrical measurements, 348, 349, 350–355, 356.
Taboos in force, during acquisition of shamanism, 277, 281, 474, 475; during a deer-hunt, 193; at erection of new dance-house, 312; while gambling, 443; while hunting, 432; during initiation into Secret Society, 324, 326, 327; while making game sticks, 441; while mourning, 242, 244, 468; during pregnancy, 228–230, 453, 454; at time of puberty ceremonial, 233, 234, 235, 236, 457, 458, 461; during war preparations, 440.
Tattooing, 167, 168, 412.
Tears, the first, 44.
Teit, James, 38, 67, 79, 85, 341, 342.
Tinder, 181.

Tobacco, 183.
Tongs, substitute for, 180.
Tozzer, A. M., 121.
Trade, 201, 202, 436.
Transportation, means of, 198–200, 435.
Turtle, part of, in creation of world, 39, 263, 286.
Turtle dance, 299–301.
Twins, superstitions regarding, 230.

Villages, sites for, 175, 421; size of, 175, 421, 422.

Wands, for shamans, 275, 278; use of, in dance, 307; use of, in initiation, 325, 327.
War, prisoners of, 206, 207, 441.
Warfare, manner of, 205, 436, 439; weapons of, 202, 436, 438.
War-party, preparation for, 439.
Warner, 130.
Washoe, the, 9, 33, 124, 125, 206.
Weather-prophets, making of, 283.
Wĕ'dabŏyem dance, 318–320.
Whiskey, exposure of fraud in obtaining, 283; novel way of obtaining, 282.
Wintún, the, antagonism of, to the Maidu, 206; creation myth of, 339; designs on baskets of, 17–19; habitat of, 17, 125; measurements of, 372, 378.
Woman, name of the first, 42.
Wood, work in, 139, 140, 394.
World, the conceptions of, 262–265, 470; first form of, 263.
Wylackie, the, measurements of, 372.

Yana, the, antagonism of, to the Maidu, 206; habitat of, 19, 34, 124.
Yokut, the, measurements of, 372.
Yŏ'ngweda dance, 307.
Yuki, the, habitat of, 24; measurements of, 368, 372, 377; relationship of, to inhabitants of Santa Barbara, 357; type of, proved by measurements, 356.


ATHABASCAN
ROGUE RIVER
APPLEGATE
Itskatawayeki
CREEK
LITTLE BUTTE CREEK
Itsa Wehetiraga
Hwohama
STEWART
Ussoaho
JACKSONVILLE
RIVER
ASHLAND
MT PITT
Makayax
CREEK
JENNY
OREGON
CALIFORNIA
Okwayig
Eras
Asarahaon
Kutsastsu
Tcitatowoki
Uttitsu
Asoahu
Sumnu
Arahi
Itutori
Aika
Umtaxaua
Itiwukha
Icuu
Awa
Waukeiwa
Opcirux
Kuumpi
OAKBAR
Ussini
HAPPY CAMP
Nupatsu
Aukni
Kwasuk
Ussopaa
Tatsuk
Ihiweax
Kusta
YREKA
Ikahig
Irutatiru
SHASTA
SHASTA RIVER
Ahotidae (Shasta Valley)
SCOTT
FT JONES
Orewitcaira
Itatyax
Iruai (Scott Valley)
RIVER
Asta
Ahawaraig
MT SHASTA
Waiika
LUTUAMI
KAROK
KLAMATH RIVER
SALMON
SOMES BAR
FORKS OF SALMON
RIVER
KONOMIHU
NEW RIVER
ATHABASCAN
CHIMARIKO
WINTUN
TRINITY RIVER
SACRAMENTO RIVER
RIVER
MC CLOUD
OKWANUTCU
ACHOMAWI
SCALE OF MILES

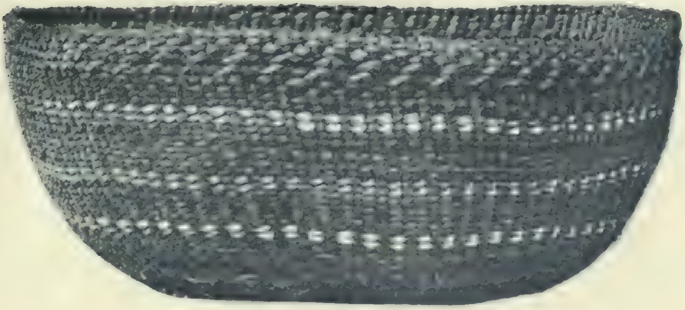
Map showing the location and subdivisions of the Shasta and surrounding tribes and the principal Villages of the Shasta.

EXPLANATION OF PLATE LX.

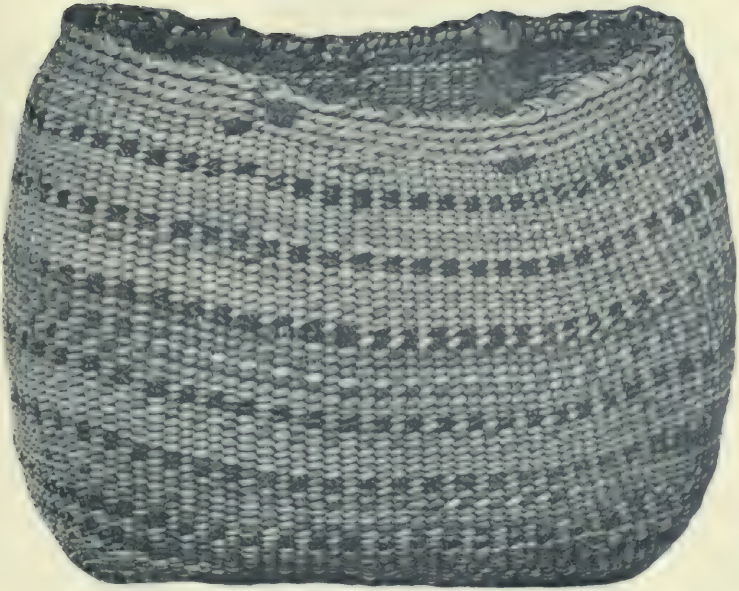
SHASTA BASKETS.

FIG. 1.—Basket with "wood set up around" design. In this specimen the warp is crossed just below the edge, as in baskets of Northwestern type. Height, 10 cm.; diam., 25 cm. Cat. No. $\frac{50}{4058}$.

FIG. 2.—Basket with "wood set up around" design. Height, 18 cm.; diam., 21 cm. Cat. No. $\frac{50}{4081}$.



1



2

SHASTA BASKETS.

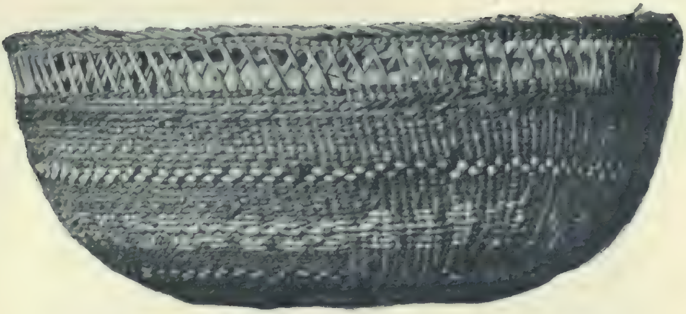
EXPLANATION OF PLATE LXI.

SHASTA BASKETS.

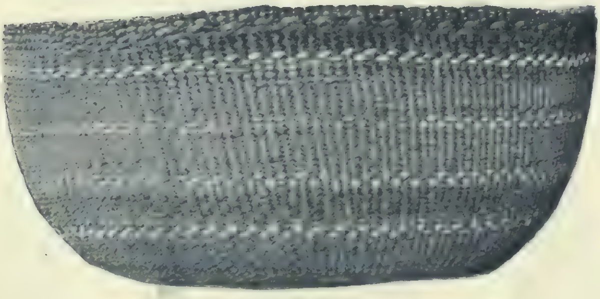
FIG. 1.—Basket with "wood set up around" design. This is the decoration most commonly found on Shasta baskets. Height, 11 cm.; diam., 25 cm. Cat. No. $\frac{50}{3057}$.

FIG. 2.—Basket with "wood set up around" design. Height, 13 cm.; diam., 28 cm. Cat. No. $\frac{50}{4047}$.

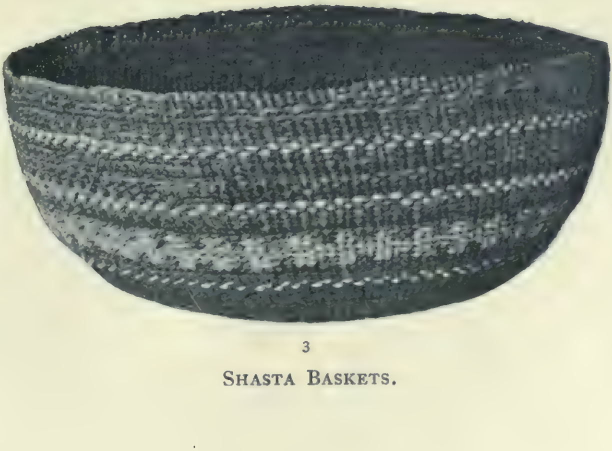
FIG. 3.—Basket with "wood set up around" design. Height, 11 cm.; diam., 29 cm. Cat. No. $\frac{50}{3080}$.



1



2



3

SHASTA BASKETS.

EXPLANATION OF PLATE LXII.

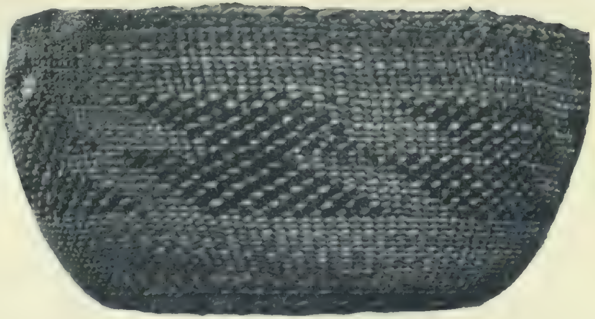
SHASTA BASKETS.

FIG. 1.—Basket with "flint goes around" design. Height, 12 cm.; diam., 24 cm. Cat. No. $\frac{50}{4050}$.

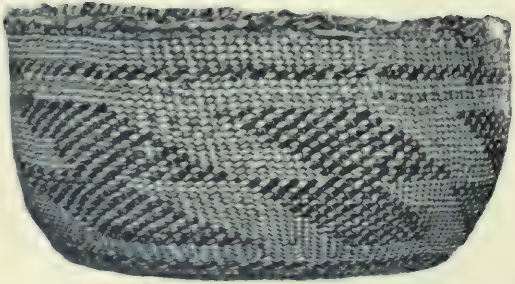
FIG. 2.—Basket with "flint goes around" design. Height, 11 cm.; diam., 23 cm. Cat. No. $\frac{50}{4052}$.

FIG. 3.—Basket with "butterfly" design, which is practically the Yurok "waxpoo." This specimen has the edge with warps turned over, which is characteristic of baskets secured from the Shasta at Siletz. Height, 7 cm.; diam., 22 cm. Cat. No. $\frac{50}{4054}$.

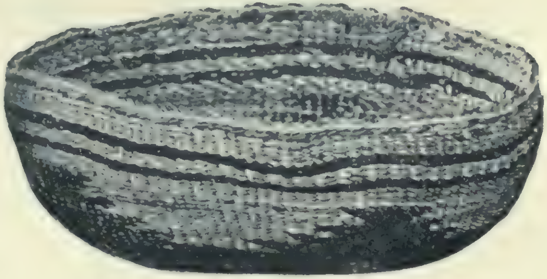
IG. 4.—Basket with "salmon-heart" design, which is much like the Yurok and Karok "sturgeon" or "snail's back." Height, 10 cm.; diam., 19 cm. Cat. No. $\frac{50}{4048}$.



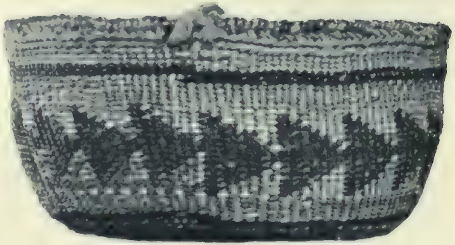
1



2



3



4

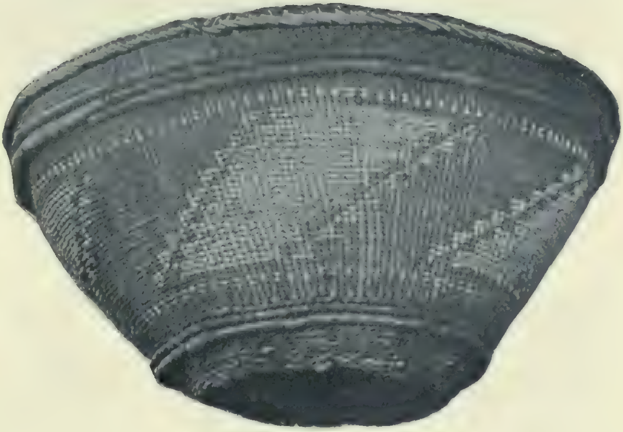
SHASTA BASKETS.

EXPLANATION OF PLATE LXIII.

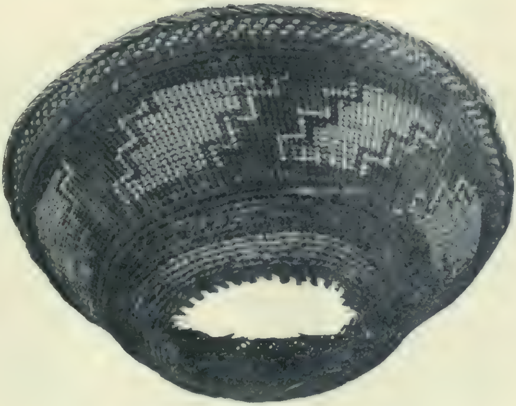
SHASTA BASKETS.

FIG. 1.—Milling-basket with design of unknown significance, but which is similar to the Yurok "ladder" design. Height, 18 cm.; diam., 39 cm. Cat. No. $\frac{50}{4068}$.

FIG. 2.—Basket with design of unknown significance. Height, 14 cm.; diam., 38 cm. Cat. No. $\frac{50}{8172}$.



1



2

SHASTA BASKETS

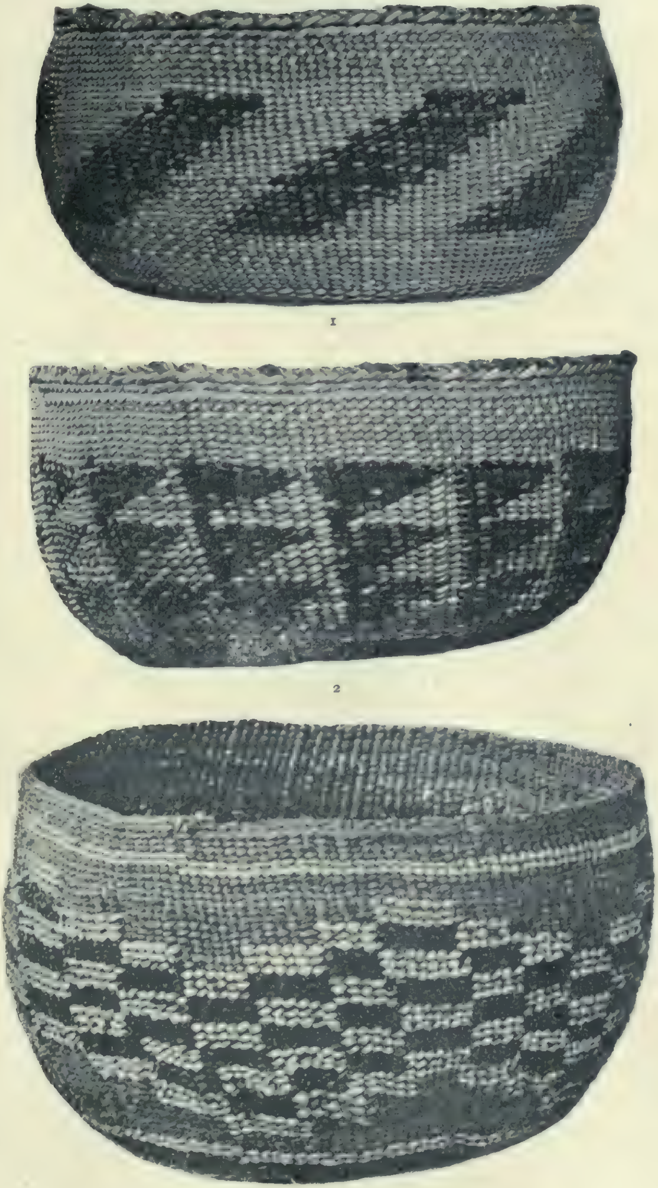
EXPLANATION OF PLATE LXIV.

SHASTA BASKETS.

FIG. 1.—Basket resembling Wintun baskets, with design "it goes round one way," which is similar to the "pulled around" design shown on a basket from the upper Sacramento. Height, 10 cm.; diam., 20 cm. Cat. No. $\frac{50}{4051}$.

FIG. 2.—Basket resembling Wintun baskets, with design "it goes round one way," which also suggests the Achomā'wi design of the "skunk." Height, 11 cm.; diam., 24 cm. Cat. No. $\frac{50}{4055}$.

FIG. 3.—Basket with design "it goes round crooked." This is identical with the Maidu design of "wood in billets." Height, 13 cm.; diam., 21 cm. Cat. No. $\frac{50}{4058}$.



SHASTA BASKETS.

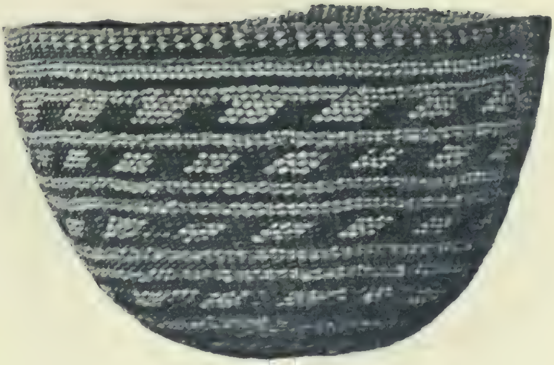
EXPLANATION OF PLATE LXV.

SHASTA BASKETS.

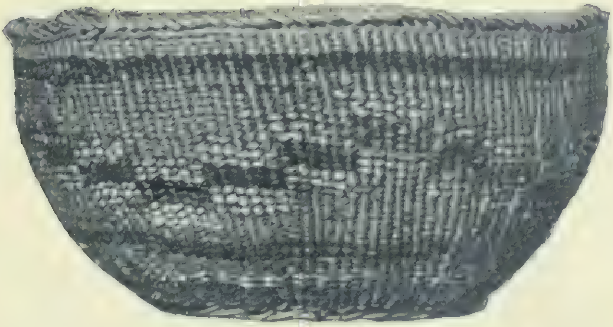
FIG. 1.—Basket with design of unknown significance. Height, 11 cm.; diam., 18 cm. Cat. No. $\frac{50}{4085}$.

FIG. 2.—Basket with design "it goes round crooked." This is identical with the Maidu design of "wood in billets." Height, 12 cm.; diam., 23 cm. Cat. No. $\frac{50}{4058}$.

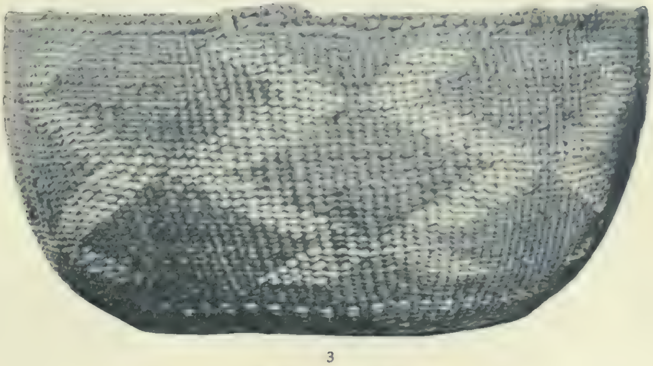
FIG. 3.—Basket with "frog's-belly" design. This is similar to the Maidu "water-snake" design. Height, 13 cm.; diam., 26 cm. Cat. No. $\frac{50}{4059}$.



1



2



3

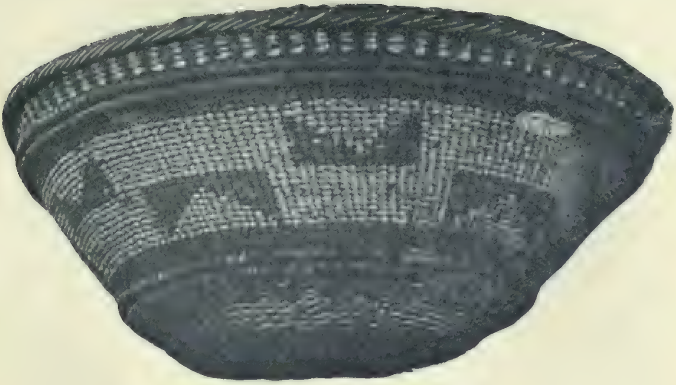
SHASTA BASKETS.

EXPLANATION OF PLATE LXVI.

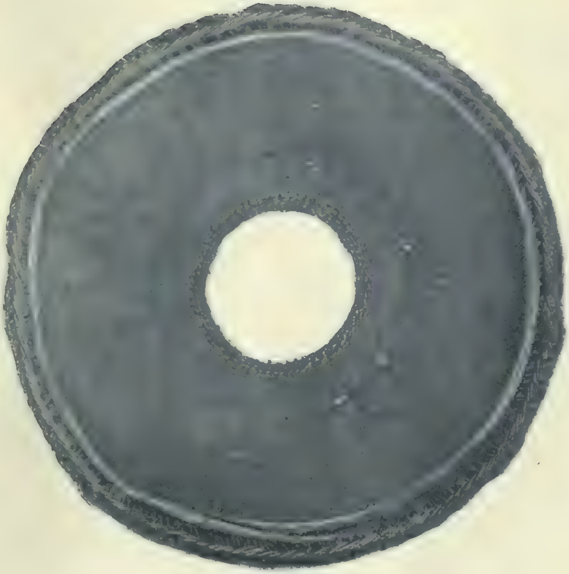
SHASTA BASKETS.

FIG. 1.—Mortar-basket with design resembling one element in the Achomā'wi "mussel's-tongue." Height, 14 cm.; diam., 39 cm. Cat. No. $\frac{50}{4062}$.

FIG. 2.—Mortar-basket with strengthening-rod. Height, 16 cm.; diam., 44 cm. Cat. No. $\frac{50}{3186}$.



1



2

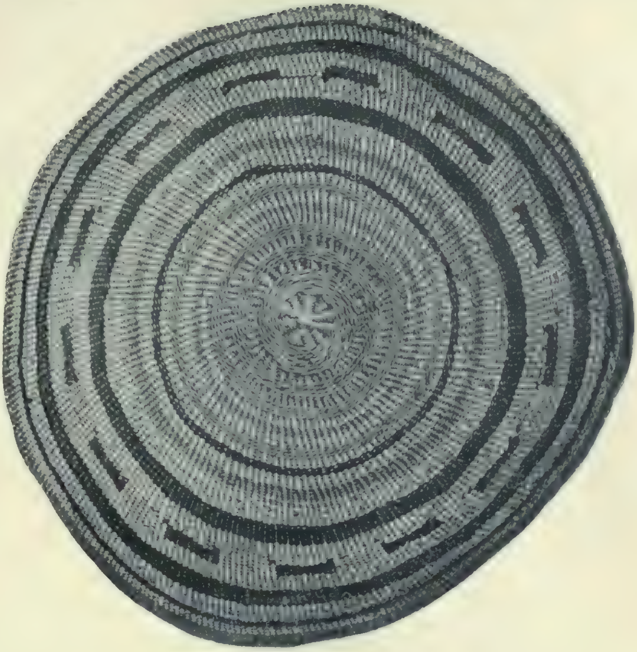
SHASTA BASKETS.

EXPLANATION OF PLATE LXVII.

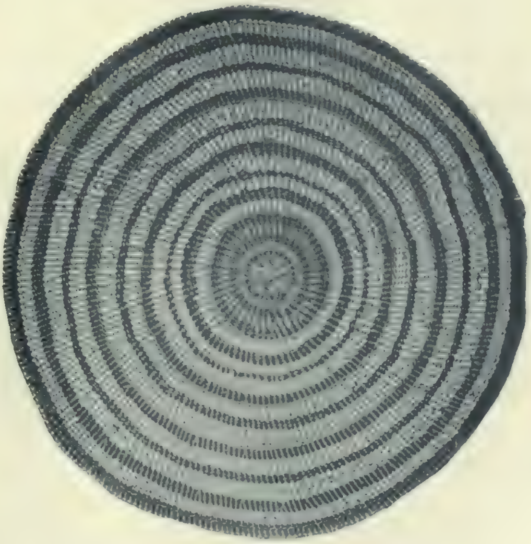
SHASTA BASKETS.

Fig. 1.—Basket with design of unknown significance. Height, 13 cm.; diam., 46 cm. Cat. No. $\frac{50}{4065}$.

Fig. 2.—Basket finished with a band of closer twining, and with design of unknown significance. Height, 7 cm.; diam., 39 cm. Cat. No. $\frac{50}{4066}$.



1



2

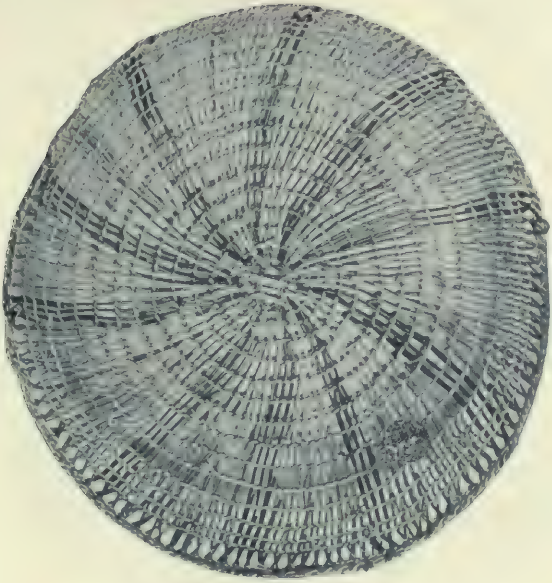
SHASTA BASKETS.

EXPLANATION OF PLATE LXVIII.

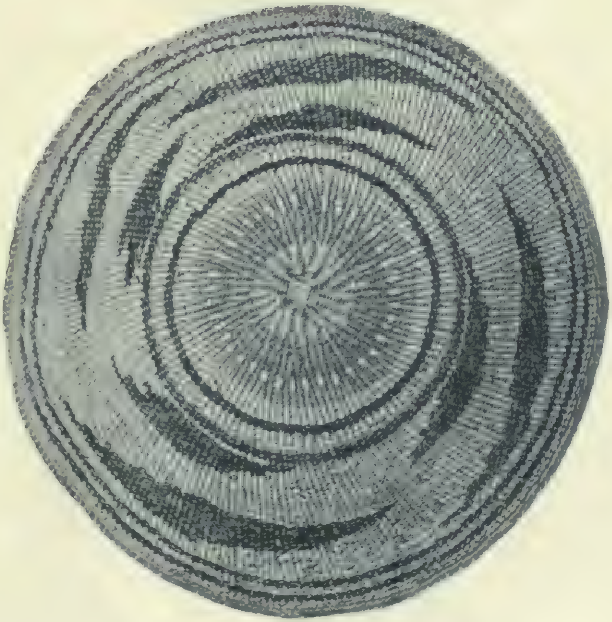
SHASTA BASKETS.

FIG. 1.—Open-work platter-basket with warp crossed just below the edge, as in baskets of Northwestern type. The ornamentation is by means of dyed warps, but the significance of the design is unknown. Height, 7 cm.; diam., 37 cm. Cat. No. $\frac{50}{4067}$.

FIG. 2.—Basket with design of unknown significance. Height, 9 cm.; diam., 40 cm. Cat. No. $\frac{50}{4068}$.



1



2

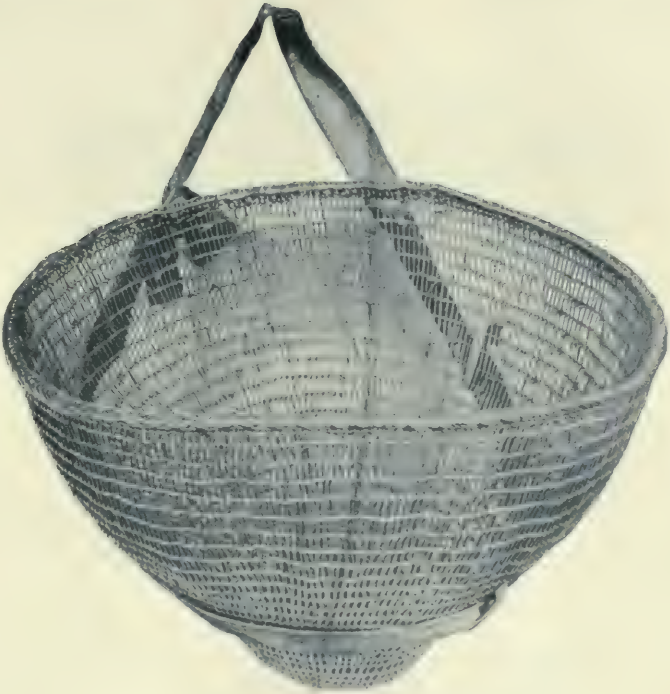
SHASTA BASKETS.

EXPLANATION OF PLATE LXIX.

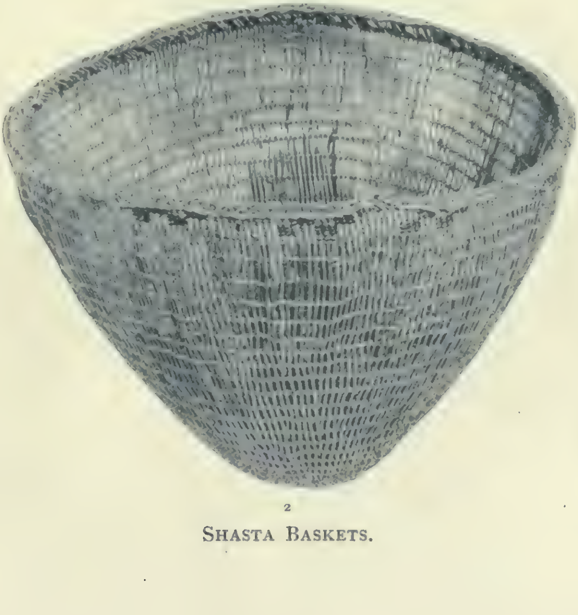
SHASTA BASKETS.

FIG. 1.— Burden-basket of conical shape and open-work type. Height, 50 cm.; diam., 56 cm. Cat. No. $\frac{50}{3184}$.

FIG. 2.— Burden-basket of conical shape and open-work type. Height, 48 cm.; diam., 53 cm. Cat. No. $\frac{50}{3185}$.



1



2

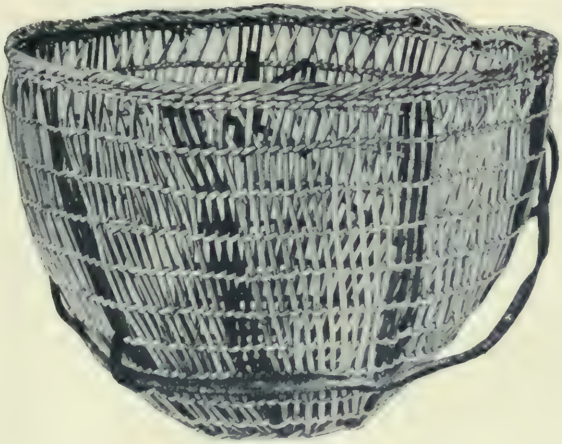
SHASTA BASKETS.

EXPLANATION OF PLATE LXX.

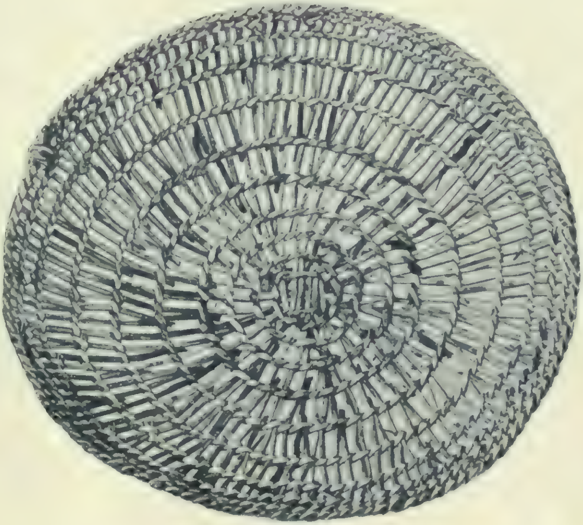
SHASTA BASKETS.

FIG. 1.—Open-work pack-basket with warp crossed just below the edge, as in baskets of Northwestern type. The ornamentation is by means of dyed warps. Height, 5 cm.; diam., 23 cm. Cat. No. $\frac{50}{3147}$.

FIG. 2.—Platter-basket. Height, 5 cm.; diam., 23 cm. Cat. No. $\frac{50}{3174}$.



1



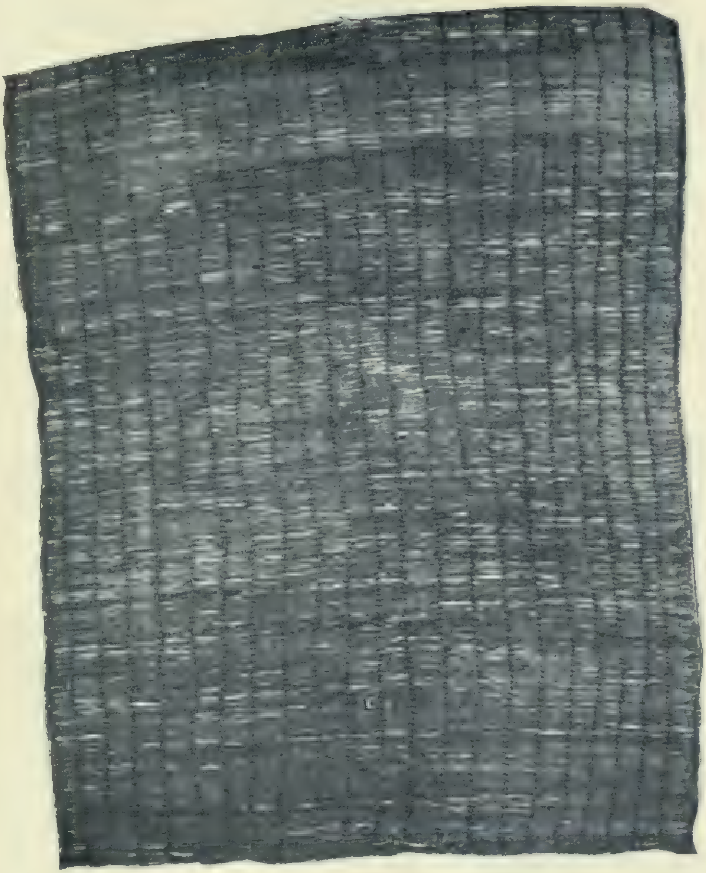
2

SHASTA BASKETS.

EXPLANATION OF PLATE LXXI.

SHASTA MAT.

This mat was made by twining, every three or four inches, woof-strands about reed warps, which were doubled at the sides. The ends of the mat are finished in a braid. Length, 166 cm.; width, 135 cm. Cat. No. $\frac{50}{3210}$.

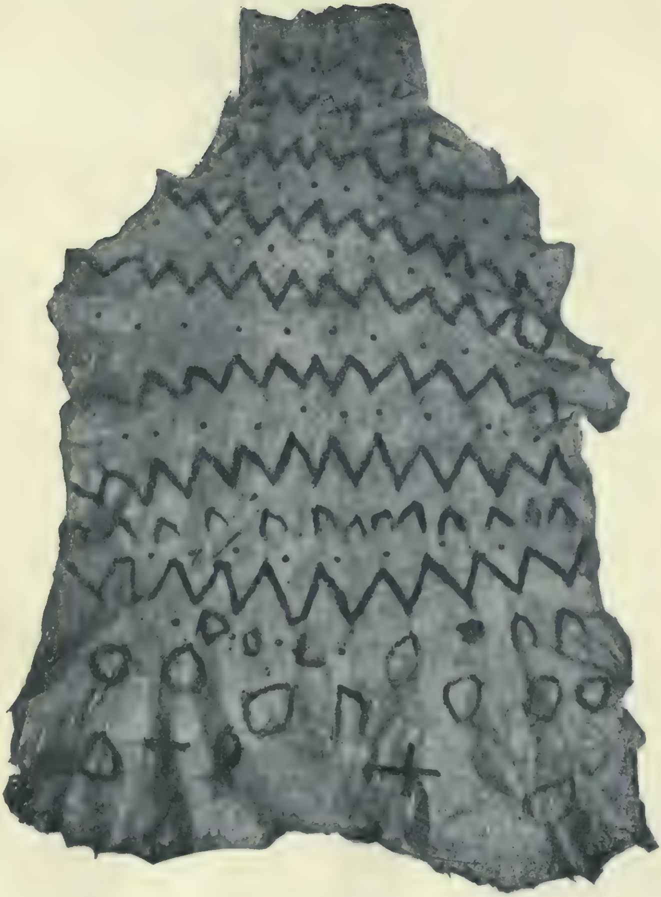


SHASTA MAT.

EXPLANATION OF PLATE LXXII.

PAINTED BUCKSKIN.

Buckskin skirt ornamented with rude zigzags and dots of red paint. This skirt is worn by shamans in connection with a painted buckskin head-dress decorated with feathers, etc. Length, 119 cm. Cat. No. $\frac{50}{3207}$.



PAINTED BUCKSKIN.

QH
1
A4
v.17

Biological
& Medical
Serials

American Museum of Natural
History, New York
Bulletin

1902-7

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

STORAGE